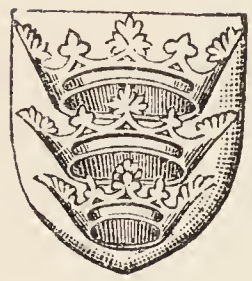
1898.



CITY AND COUNTY OF KINGSTON UPON HULL.

ANNUAL REPORT.

OF THE

MEDICAL OFFICER OF HEALTH.

J. WRIGHT MASON, M.B., C.M., D.P.H., M.R.C.S.E.,

Medical Officer of Health,
Medical Superintendent of the Sanatorium, Surgeon to the Hull City Police,
Medical Officer of Health to the Hull and Goole
Port Sanitary Authority.

HULL:
M. HARLAND AND SON, PRINTERS, MANOR STREET.

1899.

SANITARY COMMITTEE.

Chairman—Mr. Alderman FRASER.

Vice-Chairman—Mr. Councillor COHEN.

Mr. Councillor PETER ATKINSON,
Mr. Councillor MILLINGTON, J.P.
Mr. Councillor W. J. ATKINSON,
Mr. Councillor NORTH,
Mr. Councillor BRIGGS,
Mr. Councillor RICHARDSON,
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Mr. Councillor HOLDER, J.P.,
Mr. Councillor SHAW,
Mr. Councillor KESSEN,
Mr. Alderman SHERBURN, J.P.,
Mr. Councillor MCLAREN,
Mr. Councillor SKINNER,
Mr. Councillor WORK.

The Mayor (Mr. Councillor GELDER), (*ex-officio*).

Ex-Mayor (Mr. Alderman CROOK), (*ex-officio*).

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TOWN HALL, CITY AND COUNTY OF KINGSTON UPON HULL.

To the Sanitary Committee.

GENTLEMEN,

I have the honour to submit to you my Annual Report for the year ending December 31st, 1898, comprising the Statistical Returns of the Deaths in the City, the measures adopted for the prevention of disease, and the work done in the Sanitary Department.

I am, Gentlemen,

Your obedient Servant,

J. WRIGHT MASON.

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City and County of Kingston upon Hull.

REPORT, 1898

VITAL AND MORTAL STATISTICS.

Births.

During the twelve months ending December 31st, 1898, there were registered in the City and County of Kingston upon Hull, according to the returns furnished by the Registrars, 7696 Births and 4141 Deaths. Of the Births, 4086 were males and 3610 females.

The Birth-rate was equal to 33·4 per 1000 of a population of 229,887 of all ages, the official estimated population to the middle of 1898, residing in 56,861 houses, this being an average of 4·0 persons to each inhabited house. The average Birth-rate for the thirty-three great towns was 30·3 per 1000.

The excess of Births over Deaths in 1898 representing the natural increase of the population, was 3555, against 3376 and 2880 in the years 1897 and 1896 respectively.

The average density of population per acre in 1898 was 24·9. The average density of the thirty-three largest towns in England was 35·3 per acre.

The annual rateable value of the City in 1898-9 was £913,793.

Deaths.

The annual death-rate from all causes for the year under notice was equal to 18·0 per 1000, namely :—

1st quarter.	2nd quarter.	3rd quarter.	4th quarter.
18·1	15·4	21·2	17·0

Of the deaths, 2239 were males and 1902 females.

The death-rate, according to the Registrar-General's returns for thirty-three of the largest English towns, including London, averaged 19·0 per 1000 per annum, and ranged from 24·0 in Liverpool and 22·7 in Salford to 22·6 in Sunderland, 21·9 in Manchester, 21·4 in Newcastle, and 21·3 in Wolverhampton.

The following table gives the annual birth-rate and death-rate, with the corresponding Zymotic death-rate, for the years 1870 to 1898 :—

Year.	Births.	Deaths.	Population.	Birth-rate per 1,000.	Death-rate per 1,000.	Zymotic-rate per 1,000.
1870	4406	2851	119,500	36	23	5
1871	4473	2841	122,260	36	23	4
1872	4875	3266	125,210	38	26	6
1873	5153	3101	128,225	40	24	3
1874	5353	3340	131,315	40	25	5
1875	5436	3666	134,480	40	27	6
1876	5726	3131	137,630	41	22	3
1877	5822	3032	141,050	41	21	2
1878	6004	3471	144,450	41	24	4
1879	5885	3311	147,940	38	22	2
1880	5650	3532	151,500	37	23	4
1881	5634	3677	155,160	36	23	6
1882	5761	3705	158,814	36	23	4
1883	6353	3970	176,296	36	22	2
1884	6803	3834	181,225	37	21	3
1885	6269	3221	186,292	33	17	1
1886	6387	3563	191,501	33	18	2
1887	6462	3718	196,855	32	18	2
1888	6230	3297	202,359	30	16	1
1889	6820	4157	208,017	32	19	2
1890	6612	4047	213,833	31	19	1
1891	6922	4133	200,934	34	20	1
1892	8572	3965	204,750	41	19	2
1893	7109	4503	208,639	34	21	4
1894	6854	3604	212,679	32	16	1
1895	7340	4445	216,722	33	20	3
1896	7011	4131	220,844	31	18	3
1897	7465	4089	225,045	33	18	2
1898	7696	4141	229,887	33	18	2

Infantile Mortality.

The Infantile Mortality, measured by the proportion of deaths under one year of age to births registered, was 190 per 1000. For the thirty-three most populous towns in England and Wales, the proportion of deaths under one year to births registered, averaged 178 per 1000.

No. 1.—TABULATED RETURN, SHEWING THE TOTAL NUMBER OF DEATHS FOR THE YEAR 1898, AT CERTAIN AGES.

Districts.	Under One Year.	1 Year and Under 5.	5 Years and Under 15.	15 Years and Under 25.	25 Years and Under 35.	35 Years and Under 45.	45 Years and Under 55.	55 Years and Under 65.	65 Years and Under 75.	75 Years and Under 85.	85 Years and Upwards.	Totals.
Drypool	213	41	23	34	31	32	57	47	41	37	5	561
Sutton.....	108	37	4	4	14	13	24	24	17	16	1	262
East Sculcoates...	125	37	12	5	5	18	26	27	35	26	5	321
West Sculcoates..	210	61	21	25	32	35	59	80	113	73	17	726
Humber	206	64	27	42	60	80	102	87	68	45	5	786
Myton	354	94	36	42	44	47	75	74	95	68	14	943
Newington.....	209	42	14	20	18	23	25	29	21	19	4	424
Newland.....	33	6	3	7	5	6	6	7	11	14	2	100
Stoneferry	7	...	1	1	1	...	1	...	...	...	...	11
Marfleet	2	...	...	1	...	2	...	1	...	1	...	7
Totals ...	1467	382	141	181	210	256	375	376	401	299	53	4141

Table No. 2.—Shewing the Deaths Registered from all causes, with classification of ages, during the year 1898.

	AGES.											Totals.
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwds.	
I. Specific Febrile, or Zymotic Diseases	412	128	27	21	13	8	8	3	7	9	...	636
II. Parasitic Diseases	1	...	...	...	...	...	...	...	...	...	...	1
III. Dietetic Diseases	...	...	...	...	...	...	2	2	...	...	...	4
IV. Constitutional Diseases	68	41	49	78	89	84	106	83	53	18	2	671
V. Developmental Diseases	91	...	...	...	...	...	...	6	57	115	34	303
VI. Local Diseases	523	177	41	52	77	126	211	252	262	145	15	1881
VII. Violence	19	16	20	20	18	28	29	11	9	5	1	176
VIII. Ill Defined & Not Specified Causes	353	20	4	10	13	10	19	19	13	7	1	469
Totals	1467	382	141	181	210	256	375	376	401	299	53	4141
I.—Specific Febrile, or Zymotic Diseases.												
1.—Miasmatic Diseases.												
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...
Measles	29	44	6	...	...	...	...	...	...	...	...	79
Scarlet Fever	3	16	7	1	...	...	...	...	...	...	...	27
Typhus	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough	34	32	1	...	...	...	...	...	...	...	...	67
Diphtheria	1	7	2	...	...	...	...	...	...	...	...	10
Simple Continued and Ill-defined Fever	...	...	...	...	...	...	...	...	...	...	...	...
Enteric or Typhoid Fever	...	4	9	18	12	5	5	2	1	1	...	57
Other Miasmatic Diseases	...	...	...	...	...	...	...	...	...	...	...	...
2.—Diarrhœal Diseases.												
Cholera	...	...	...	...	...	...	...	...	...	...	...	...
Choleraic Diarrhœa	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa	325	25	2	1	...	...	1	...	5	6	...	365
English Cholera	...	...	...	...	...	...	...	...	...	...	...	...
3.—Malarial Diseases.												
Intermittent Fever	...	...	...	...	...	...	...	...	...	...	...	...
4.—Zoogenous Diseases.												
Cow-pox and effects of Vaccination	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases (*e.g.*, Hydrophobia, Glanders, Splenic Fever)	...	...	...	...	...	...	...	...	...	...	...	...
5.—Venereal Diseases.												
Syphilis	17	...	...	...	...	1	2	...	...	...	...	20
Gonorrhœa, Stricture of Urethra	...	...	...	...	...	...	...	...	...	...	...	...
6.—Septic Diseases.												
Erysipelas	3	...	...	...	...	2	...	1	1	2	...	9
Pyæmia, Septicæmia	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	...	...	...	1	1	...	...	...	...	...	...	2

Table 2.—*Continued.*

	AGES.											TOTALS.
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwds.	
II.—Parasitic Diseases.												
Thrush, and other Vegetable Parasitic Diseases	1	...	...	...	...	...	...	...	...	...	...	1
Worms, Hydatids, and other Animal Parasitic Diseases	...	...	...	...	...	...	...	...	...	...	...	...
III.—Dietetic Diseases.												
Want of Breast Milk, Starvation, Improper Feeding	...	...	...	...	...	...	...	...	...	...	...	...
Scurvy	...	...	...	...	...	...	...	...	...	...	...	...
Chronic Alcoholism	...	...	...	...	...	...	2	2	...	...	...	4
Delirium Tremens	...	...	...	...	...	...	...	...	...	...	...	...
IV.—Constitutional Diseases.												
Rheumatic Fever, Rheumatism of the Heart	...	...	1	1	...	...	...	...	...	...	...	2
Rheumatism	...	...	2	2	1	1	...	1	5	2	...	14
Gout	...	...	...	...	...	...	...	1	...	1	...	2
Rickets	...	...	...	...	...	...	...	...	...	...	...	...
Cancer, Malignant Disease	...	...	1	2	7	19	52	46	31	11	1	170
Tabes Mesenterica	28	3	...	...	...	...	...	...	...	...	...	31
Tubercular Meningitis, Hydrocephalus	21	21	27	4	2	...	1	2	1	...	...	79
Phthisis	8	9	10	56	64	53	36	21	12	1	...	270
Other forms of Tuberculosis, Scrofula	8	7	4	9	8	6	9	3	1	...	1	56
Purpura, Hemorrhagic Diathesis	...	...	...	...	...	...	...	...	...	...	...	...
Anæmia, Chlorosis, Leucocythæmia	2	...	1	1	3	...	2	3	...	...	...	12
Glycosuria, Diabetes Mellitus	...	...	1	...	3	1	...	1	2	1	...	9
Other Constitutional Diseases	1	1	2	3	1	4	6	5	1	2	...	26
V.—Developmental Diseases.												
Premature Birth	91	...	...	...	...	...	...	...	...	...	...	91
Atelectasis	...	..	...	...	...	...	...	...	...	...	...	...
Congenital Malformations	...	...	...	...	...	...	...	...	...	...	...	...
Old Age	...	...	...	...	...	...	...	6	57	115	34	212
VI.—Local Diseases.												
1.—Diseases of Nervous System.												
Inflammation of Brain or Membranes	...	1	2	1	2	1	...	...	...	...	...	7
Apoplexy, Softening of Brain, Hemiplegia	2	5	2	3	6	11	19	31	50	21	4	154
Brain Paralysis	...	...	...	...	...	1	1	5	3	4	...	14
Insanity, General Paralysis of the Insane	...	...	1	...	1	6	4	3	8	4	1	28
Epilepsy	...	...	...	3	3	1	1	3	2	1	...	14
Convulsions	139	19	...	...	...	...	1	1	...	...	...	160
Laryngismus Stridulus (Spasm of Glottis)	2	..	...	...	...	...	...	...	...	...	...	2
Disease of Spinal Cord, Paraplegia, Paralysis Agitans	1	1	2	5	1	1	7	2	1	2	...	23
Other Diseases of Nervous System	...	...	...	...	...	...	...	...	...	...	...	...

Table No. 2.—*Continued.*

	AGES.											Totals.
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwds.	
2.—Diseases of Organs of Special Sense.												
(*e.g.*, of Ear, Eye, Nose)	...	...	2	...	...	1	...	...	...	...	...	3
3.—Diseases of Circulatory System.												
Pericarditis	...	1	1	...	1	...	1	3	...	...	...	7
Acute Endocarditis	...	...	1	...	1	1	...	...	...	...	...	3
Valvular Diseases of Heart	1	...	4	5	7	9	26	22	20	7	...	101
Other Diseases of Heart	4	5	3	3	12	14	38	45	41	31	5	242
Aneurism	...	...	...	...	...	6	8	3	1	...	...	19
Embolism, Thrombosis	...	...	...	1	...	2	2	...	2	5	...	12
Other Diseases of Blood Vessels	...	...	...	...	...	...	...	...	...	...	...	...
4.—Diseases of Respiratory System.												
Laryngitis	2	4	2	...	...	2	...	...	...	1	...	11
Croup	2	5	3	...	...	...	...	...	...	...	...	10
Emphysema, Asthma	...	...	...	...	...	...	1	...	...	...	...	1
Bronchitis	136	42	2	2	5	8	32	61	77	41	4	410
Pneumonia	53	48	6	10	6	11	22	15	15	5	...	191
Pleurisy	...	...	...	1	1	4	6	2	3	1	...	18
Influenza	1	...	1	...	6	7	9	11	11	8	...	54
Other Diseases of Respiratory System	...	...	...	...	...	...	...	...	...	...	..	...
5.—Diseases of Digestive System.												
Dentition	38	12	...	...	...	...	...	...	...	...	...	50
Sore Throat, Quinsy	...	...	...	...	...	...	..	...	...	...	...	...
Diseases of Stomach	2	2	...	1	1	1	...	1	...	1	...	9
Enteritis and Dysentery	126	20	...	2	2	...	4	8	2	3	1	130
Obstructive Diseases of Intestine	5	...	1	3	3	3	4	5	11	3	...	35
Peritonitis	1	4	3	6	1	6	2	1	3	...	...	27
Ascites	...	...	...	...	...	...	...	1	...	...	...	1
Cirrhosis of Liver	...	1	...	...	...	6	7	8	5	...	...	27
Jaundice and other Diseases of Liver	1	...	...	...	1	2	...	1	1	...	...	6
Other Diseases of Digestive System	..	...	...	...	...	...	1	...	...	...	...	1
6.—Diseases of Lymphatic System.												
(*e.g.*, of Lymphatics and of Spleen)	...	...	...	...	...	...	...	...	...	...	...	...
7.—Diseases of Gland-like Organs of Uncertain Use.												
(*e.g.*, Bronchocele, Addison's Disease)	...	...	...	...	...	...	...	...	...	...	...	...
8.—Diseases of Urinary System.												
Nephritis	1	1	4	1	7	5	5	7	2	3	...	36
Bright's Disease, Albuminuria	...	...	1	1	2	5	3	5	4	1	...	22
Disease of Bladder or of Prostate	...	...	...	...	...	...	3	1	...	...	...	4
Other Diseases of the Urinary System	...	...	...	...	1	1	4	3	...	...	...	9

Table No. 2.—*Continued.*

	AGES.											Totals.
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwds.	
9.—Diseases of Reproductive System.												
A. *Of Organs of Generation.*												
Male Organs	...	...	...	...	...	...	...	...	...	...	...	...
Female Organs	...	...	...	1	1	2	...	2	...	1	...	7
B. *Of Parturition.*												
Abortion, Miscarriage	...	...	...	1	1	2	...	...	...	...	...	4
Puerperal Convulsions	...	...	...	...	...	...	...	...	...	...	...	...
Placenta prævia, Flooding	...	...	...	...	...	2	...	...	...	...	...	2
Other Accidents of Child Birth	...	...	...	1	4	4	...	...	...	...	...	9
10.—Diseases of Bones & Joints.												
Caries. Necrosis	...	...	...	...	1	...	...	1	...	...	...	2
Arthritis, Ostitis, Periostitis	...	...	...	1	...	...	...	...	...	...	...	1
Other Diseases of Bones and Joints	6	6	...	...	...	...	...	1	...	2	...	15
11.—Diseases of Integumentary System.												
Carbuncle, Phlegmon	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Integumentary System	...	...	...	...	...	...	...	...	...	...	...	...
VII.—Violence.												
1.—Accident or Negligence.												
Fractures and Contusions	1	2	6	5	5	8	13	5	3	2	1	51
Gunshot Wounds	...	...	...	...	...	...	...	...	...	...	...	...
Cut, Stab	...	1	...	...	...	...	...	...	...	...	...	1
Burn, Scald	1	12	7	1	1	1	1	...	2	1	...	27
Poison	...	...	...	1	...	1	1	1	...	...	...	4
Drowning	...	1	6	6	5	8	6	1	3	1	...	37
Suffocation	15	...	...	1	1	...	1	1	...	...	...	19
Otherwise	2	...	1	...	...	...	...	...	...	...	...	3
2.—Homicide.												
Manslaughter	...	...	...	1	...	...	...	...	...	...	...	1
Murder	...	...	...	...	...	1	...	...	...	...	...	1
3.—Suicide.												
Gunshot Wounds	...	...	...	...	...	...	...	1	...	...	...	1
Cut, Stab	...	...	...	...	2	...	1	...	...	1	...	4
Poison	...	...	...	3	...	4	...	1	1	...	...	9
Drowning	...	...	...	1	2	3	2	1	...	...	...	9
Hanging	...	...	...	1	2	2	4	...	...	...	...	9
Otherwise	...	...	...	...	...	...	...	...	...	...	...	...
VIII.—Ill-Defined and Not Specified Causes.												
Dropsy	...	...	...	...	...	...	...	...	1	...	...	1
Debility, Atrophy, Inanition	331	13	...	1	...	1	1	2	2	1	1	353
Mortification	...	...	...	...	2	...	2	...	4	...	...	8
Tumour	...	1	...	2	1	...	5	4	3	1	...	17
Abscess	3	3	...	6	7	5	7	4	2	1	...	38
Hæmorrhage	...	1	1	1	2	1	3	1	1	1	...	12
Sudden Death (cause not ascertained)	...	...	...	...	...	...	...	...	...	...	...	...
Causes not specified or ill-defined	19	2	3	...	1	3	1	8	...	3	...	40

Summary of Table No. 2.

	No. of Deaths.
I.—Specific Febrile, or Zymotic Diseases—	
1. Miasmatic Diseases	240
2. Diarrhœal ,,	365
3. Malarial ,,	...
4. Zoogenous ,,	...
5. Venereal ,,	20
6. Septic ,,	11
II.—Parasitic Diseases	1
III.—Dietetic Diseases—	4
IV.—Constitutional Diseases	671
V.—Developmental Diseases	303
VI.—Local Diseases—	
1. Diseases of Nervous System	402
2. Diseases of Organs of Special Sense	3
3. Diseases of Circulatory System	384
4. Diseases of Respiratory System	695
5. Diseases of Digestive System	286
6. Diseases of Lymphatic System	...
7. Diseases of Gland-like Organs of Uncertain Use	...
8. Diseases of Urinary System	71
9. Diseases of Reproductive System—	
(*a*). Diseases of Organs of Generation	7
(*b*). Diseases of Parturition	15
10. Diseases of Bones and Joints	18
11. Diseases of Integumentary System	...
VII.—Violence—	
1. Accident or Negligence	142
2. Homicide	2
3. Suicide	32
VIII.—Ill-Defined and not Specified Causes	469
TOTAL	4141

No. 4.—MORTALITY IN TWENTY LARGE TOWNS, 1881-1898.

Cities and Boroughs.	Annual Death-rate per 1000 living (in years of 52 or 53 weeks).																	
	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898
London	21·2	21·4	20·4	20·3	19·7	19·9	19·6	18·5	17·4	20·3	21·4	20·6	21·3	17·8	19·8	18·6	18·2	18·7
Liverpool	26·7	26·5	26·7	25·2	23·8	23·8	23·7	20·3	21·6	23·6	27·4	24·7	27·3	23·8	28·8	22·7	24·4	24·0
Manchester	25·5	26·7	27·6	26·4	26·5	26·3	28·7	26·1	26·7	30·6	26·5	23·8	24·9	20·4	25·2	22·6	23·1	21·9
Birmingham	20·0	20·9	21·3	21·3	19·3	19·9	19·7	17·8	18·7	20·7	22·2	20·4	22·0	18·6	20·3	20·8	21·6	20·0
Leeds	21·6	23·2	23·3	24·1	19·9	21·9	21·1	20·6	22·1	22·6	22·9	19·8	22·3	17·9	20·5	18·8	19·9	19·2
Sheffield	21·1	21·7	22·9	23·3	20·7	19·8	21·6	20·5	20·9	24·9	23·9	20·8	22·3	17·8	20·5	19·3	21·2	20·2
Bristol	19·6	19·2	17·9	18·3	19·7	19·3	20·4	16·9	17·6	19·2	20·9	19·5	18·9	17·3	18·1	16·9	17·2	17·2
*West Ham	...	...	...	...	...	...	...	...	...	...	...	18·6	18·9	16·2	17·9	18·6	15·7	15·4
Nottingham	22·4	23·6	21·3	22·9	19·9	20·4	18·7	17·3	17·0	16·5	19·9	18·7	18·5	17·2	19·0	17·5	18·8	17·7
Bradford	19·7	21·2	18·3	20·1	17·7	19·2	19·9	17·1	19·2	20·4	22·2	18·0	21·0	17·0	19·9	16·5	17·4	17·6
Hull	**23·8**	**23·2**	**22·5**	**21·1**	**17·2**	**18·8**	**19·2**	**16·4**	**20·3**	**19·2**	**21·0**	**19·6**	**21·8**	**17·4**	**20·8**	**18·9**	**18·6**	**18·4**
Newcastle	21·8	23·1	25·5	23·1	21·1	22·2	25·3	20·6	25·2	25·9	23·8	19·7	21·0	18·3	20·5	18·5	19·1	21·4
Salford	22·6	23·2	22·4	22·3	21·1	21·1	22·2	21·1	20·5	22·4	26·0	24·6	24·1	21·0	25·6	22·6	23·9	22·7
Leicester	21·8	20·1	19·4	22·0	19·8	20·3	19·5	18·3	16·9	17·9	21·7	18·2	20·0	14·7	17·2	16·7	17·7	16·9
Portsmouth	19·7	21·5	18·6	19·3	17·1	23·8	19·5	18·8	18·1	19·6	19·0	18·5	18·2	15·2	17·8	16·6	16·2	16·3
*Cardiff	...	20·0	20·2	24·4	25·7	22·6	21·9	20·5	19·5	20·8	22·1	18·8	19·7	16·2	18·2	16·8	14·9	14·8
Oldham	22·8	24·6	22·0	24·4	22·0	22·8	23·8	20·3	20·4	21·2	25·7	22·0	21·0	18·6	22·0	20·3	19·2	17·6
Sunderland	20·9	26·5	24·5	23·0	23·8	19·5	19·7	18·1	22·9	22·7	25·0	20·9	22·5	20·8	21·8	19·8	19·7	22·6
Blackburn	...	25·1	24·5	24·1	21·8	25·5	25·5	23·9	25·5	23·5	25·8	21·7	23·3	17·9	24·3	17·9	19·5	18·4
*Croydon	...	...	...	...	...	...	...	...	...	...	...	15·8	16·3	13·2	14·5	16·1	13·1	13·9

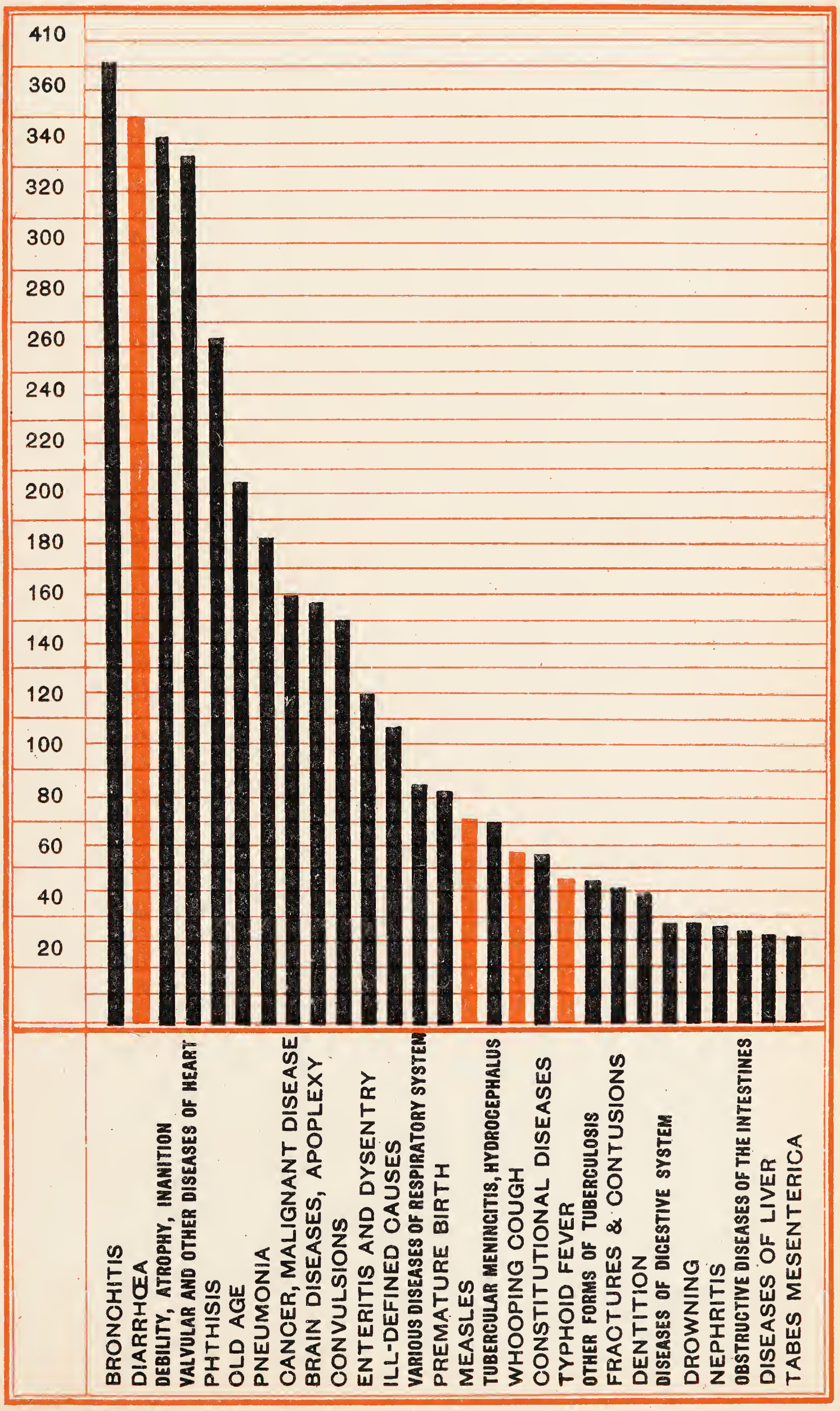
* Note—These towns were not included in previous years.

No. 3.—TABLE SHEWING BIRTHS, DEATHS, AND METEOROLOGICAL CONDITIONS, 1898

1898. FORTNIGHT ENDING	TEMPERATURE. Mean	Highest	Lowest	Rainfall in inches	Mean humidity, saturation 100	Births	Birth-rate	DEATHS. All Causes	Under one year	Over one year and under five years	Over 25 years	DEATHS FROM ZYMOTIC DISEASES. Small Pox	Measles	Scarlatina	Diphtheria	Whooping Cough	Fevers	Deaths from Diarrhœa	DEATH RATE PER 1000. Zymotic	Diarrhœa	All causes
January 8 ...	42·6	53·0	28·0	0·85	86·1	305	34·4	155	45	19	76	...	5	3	...	1	...	...	1·0	....	17·5
„ 22 ...	41·6	55·0	29·0	...	87·9	315	35·6	157	42	23	79	...	8	2	1	3	3	1	2·0	0·1	17·7
February 5 ...	42·8	56·0	28·0	0·69	81·4	306	34·5	137	37	16	69	...	7	3	...	5	2	1	2·0	0·1	15·4
„ 19 ...	41·5	55·0	30·0	0·48	80·5	279	31·5	155	35	22	82	...	6	1	1	1	1	...	1·1	....	17·5
March 5 ...	37·3	48·0	24·0	0·53	83·6	313	35·3	161	46	19	87	...	5	...	1	3	1	1	1·2	0·1	18·2
„ 19 ...	40·8	58·0	25·0	0·25	79·6	305	34·4	206	51	29	118	...	6	1	...	4	1	...	1·3	....	23·2
April 2 ...	38·9	54·0	27·0	0·94	82·0	286	32·3	173	47	25	89	...	3	1	1	7	...	..	1·3	....	19·5
„ 16 ...	47·5	68·0	27·0	2·04	74·8	275	31·0	176	42	28	95	...	8	1	...	2	...	...	1·2	....	19·8
„ 30 ...	44·8	61·0	30·0	0·84	76·6	317	35·8	147	34	16	82	...	3	2	...	4	...	1	1·1	0·1	16·6
May 14 ...	48·6	63·0	36·0	0·99	74·5	298	33·6	130	38	18	60	...	5	2	...	4	...	1	1·3	0·1	14·6
„ 28 ...	47·4	64·0	34·0	0·53	70·0	322	36·4	123	36	18	60	..	5	1	1	2	2	1	1·3	0·1	13·9
June 11 ...	52·4	70·0	34·0	0·98	79·0	299	33·8	110	29	11	62	...	5	1	1	5	...	...	1·3	....	12·4
„ 25 ...	56·0	71·0	37·0	0·75	74·0	305	34·4	122	36	11	63	...	3	2	...	5	...	2	1·3	0·2	13·7
July 9 ...	45·0	75·0	57·4	0·56	73·0	307	34·7	128	35	12	71	...	2	1	...	2	2	3	1·1	0·3	14·4
„ 23 ...	59·6	74·0	40·0	0·11	78·0	278	31·4	102	35	12	47	...	2	1	...	1	...	3	0·7	0·3	11·5
August 6 ...	59·3	77·6	44·0	2·00	76·4	273	30·8	129	46	10	64	...	...	...	...	1	...	11	1·3	1·2	14·5
„ 20 ...	60·9	81·0	44·0	0·47	85·1	302	34·1	162	85	3	60	...	1	1	...	2	3	41	5·4	4·6	18·3
September 3 ...	59·4	75·0	44·0	1·27	77·5	342	38·6	243	136	22	74	...	...	...	1	3	...	76	9·0	8·5	27·4
„ 17 ...	63·8	85·0	48·0	0·04	80·1	297	33·5	264	140	27	82	...	2	...	1	...	3	78	9·4	8·8	29·8
October 1 ...	53·3	85·0	37·0	0·22	78·0	288	32·5	266	146	19	84	...	...	...	...	5	5	87	10·9	9·8	30·0
„ 15 ...	51·9	66·0	35·0	0·30	87·4	243	27·4	211	83	26	90	...	...	...	1	1	2	40	4·9	4·5	23·8
„ 29 ...	52·9	65·0	39·0	2·83	87·1	293	33·1	159	56	15	74	...	1	...	...	4	10	13	3·1	1·4	17·9
November 12 ...	47·7	61·0	36·0	0·56	87·0	287	32·4	149	38	17	75	...	4	3	...	...	7	2	1·8	0·2	16·8
„ 26 ...	44·1	55·0	26·0	1.61	89·1	261	29·5	111	35	6	58	...	1	...	...	...	3	2	0·6	0·2	12·5
December 10 ...	44·0	58·0	30·0	0·86	83·8	315	35·6	138	36	11	75	...	...	...	...	1	6	1	0·9	0·1	15·6
„ 24 ...	42·1	56·0	29·0	0·21	84·3	285	32·2	117	23	14	70	...	...	...	..	2	2	1	0·5	0·1	13·2

CHART showing the COMPARATIVE NUMBER of the TWENTY-EIGHT principal causes of DEATH during the year 1898.

Deaths from Zymotic Diseases
Deaths from Other Diseases



No. 5.—TABLE SHEWING THE BIRTH-RATE, DEATH-RATE, ZYMOTIC AND INFANTILE MORTALITY, AND THE DISTRICTS IN WHICH THEY HAVE OCCURRED, 1898.

DISTRICT.	Estimated Population.	Area in acres.	Persons to an acre.	Birth-rate per 1000.	Death-rate from all causes per 1000.	Zymotic Death-rate per 1000.	Rate per 1000 of Deaths from all causes under 1 year.	Rate per 1000 of Deaths from all causes over 1 year and under 5 years.
Drypool	35548	1752	20·2	39·6	16·0	2·7	6·0	1·1
Sutton	14531	305	47·6	39·8	18·7	3·2	7·7	2·6
East Sculcoates .	15127	284	53·2	35·1	21·4	3·7	8·3	2·4
West Sculcoates.	46041	493	93·3	25·6	15·7	1·9	4·5	1·3
Humber	39061	409	95·5	23·7	20·1	1·8	5·2	1·6
Myton	46859	722	64·9	37·4	20·0	3·0	7·5	2·0
Newington	23047	1498	15·3	44·5	18·4	3·4	9·0	1·8
Newland	8345	1872	4·4	31·3	12·5	1·7	4·1	0·7
Stoneferry	1035	582	1·7	17·3	10·6	5·7	7·0	...
Marfleet	293	1285	0·2	...	...	...	...	...
City Total.....	229887	9202	24·9	33·4	18·0	2·6	6·3	1·6

Marriages.

During the year 1898, the number of marriages registered in the City was 2160, as against 2202 in 1897, 1977 in 1896, and 1841 in 1895. The marriages were distributed over the four quarters of the year as follows:—First quarter, 388; second quarter, 571; third quarter, 530; fourth quarter, 671.

The marriage rate, *i.e.*, persons married to 1000 inhabitants, was 18·6 in 1898 as against 19·5 in 1897, 17·8 in 1896, and 17·0 in 1895.

The marriage rate in England and Wales was 18·7 per 1000, compared with 16·0 in 1897, 15·7 in 1896, and 16·6 in 1895.

The following table shews the number of marriages that have taken place in Hull during the undermentioned years:—

Year.	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898
No. of Marriages	1697	1824	1764	1798	1872	1636	1845	1841	1977	2202	2160

Specific Febrile, or Zymotic Diseases.

This class of diseases accounted for 636 deaths, as against 690 in the year 1897 and 746 in the year 1896, the death-rate for 1898 being equal to an annual rate of mortality of 2·7 per 1000 persons living.

Seven Principal Zymotics.

Six hundred and five deaths have been recorded from the seven principal Zymotic diseases; a mortality at the rate of 2·63 per 1000 of the population, and distributed over the four quarters of the year as follows:—First quarter, 84; second quarter, 74; third quarter, 333; and fourth quarter, 114 respectively.

The average number of deaths from the seven principal Zymotics for the past 20 years was 550.

The death rate from these diseases during the year 1898 in the thirty-three great towns, including London, averaged 2·85 of their estimated population. The highest aggregate rates from the seven Zymotic diseases above enumerated were 3·35 in Leicester, 3·69 in Sunderland, 3·82 in Sheffield, and 4·03 in Salford.

The following table shews the deaths per 1000 from the seven principal Zymotic diseases in Kingston-upon-Hull for the years 1872 to 1898, both incluslve :—

Year.	Seven Zymotic Diseases.	Small Pox.	Measles.	Scarla-tina.	Diphth-eria.	Whooping Cough.	Fevers.	Diarrhœa.
1872	6·50	1·72	0·10	0·23	0·06	0·80	1·37	2·22
1873	3·90	0·20	0·31	0·28	0·05	0·33	0·95	1·77
1874	5·25	0·02	0·38	1·40	0·09	0·37	1·29	1·69
1875	6·16	0·01	0·23	2·07	0·05	1·00	0·80	1·99
1876	3·52	0·00	0·33	0·42	0·07	0·44	0·55	1·71
1877	2·94	1·01	0·28	0·22	0·09	0·44	0·40	1·50
1878	4·13	0·01	0·03	0·14	0·04	0·40	0·65	2·87
1879	2·33	0·00	0·26	0·53	0·10	0·61	0·36	0·47
1880	4·80	0·00	1·34	0·40	0·03	0·95	0·31	1·75
1881	6·12	0·02	0·05	4·48	0·03	0·24	0·39	0·90
1882	4·59	0·10	0·52	1·66	0·05	0·18	0·37	1·68
1883	2·91	0·03	0·04	0·44	0·12	1·28	0·36	0·68
1884	3·53	0·09	0·47	0·29	0·14	0·34	0·40	1·82
1885	1·06	0·05	0·08	0·20	0·03	0·16	0·20	0·31
1886	2·33	0·00	0·14	0·24	0·02	0·40	0·14	1·37
1887	2·70	0·01	0·62	0·34	0·05	0·41	0·14	1·10
1888	1·16	0·09	0·01	0·18	0·04	0·21	0·16	0·42
1889	2·80	0·00	0·91	0·06	0·04	0·55	0·21	1·02
1890	1·61	0·01	0·07	0·11	0·07	0·32	0·17	0·85
1891	1·45	0·00	0·35	0·09	0·05	0·15	0·18	0·60
1892	2·43	0·00	0·70	0·11	0·04	0·54	0·15	0·85
1893	4·01	0·04	0·59	0·15	0·09	0·36	0·45	2·27
1894	1·57	0·01	0·42	0·17	0·08	0·37	0·15	0·33
1895	3·21	0·00	0·07	0·17	0·11	0·20	0·22	2·41
1896	3·20	0·00	1·15	0·24	0·17	0·47	0·27	0·86
1897	2·96	0·00	0·09	0·27	0·08	0·25	0·23	2·00
1898	2·63	0·00	0·34	0·11	0·04	0·29	0·24	1·58

No. 6.—TABLE SHEWING THE DEATHS FROM THE PRINCIPAL ZYMOTIC DISEASES IN THE TWENTY YEARS, 1879 TO 1898.

DISEASE.	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	Proportion of deaths to 1,000 deaths in 1897.	1898	Proportion of deaths to 1,000 deaths in 1898.
Cholera	...	...	...	...	...	...	...	...	...	...	..	...	...	2	12	...	...	...	...	.....	...	.....
,, (English)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	.....	...	.....
Small Pox	...	...	4	16	7	18	10	...	2	19	...	3	...	...	9	3	...	...	1	.....	...	.....
Measles	17	299	3	83	8	86	15	28	123	4	191	15	71	145	126	91	17	256	22	5·3	79	19·0
Scarlatina	76	60	682	263	74	43	38	47	67	38	13	25	19	24	33	37	38	54	62	15·1	27	6·5
Diphtheria	13	3	3	8	21	27	7	4	11	10	10	16	12	10	20	19	25	39	19	4·6	10	2·4
Whooping Cough	83	125	43	30	226	62	31	78	82	44	115	70	32	111	77	79	44	106	57	13·9	67	16·1
Fevers	54	48	62	60	58	73	38	27	29	34	44	35	37	31	96	34	49	61	53	12·9	57	13·7
Diarrhœa	56	367	137	266	119	331	59	262	217	86	213	183	122	176	474	72	524	191	451	110·2	365	88·1
Totals ...	299	902	934	726	513	640	198	446	531	235	586	347	293	499	847	335	697	707	666	162·8	605	146·1

No. 7.—TABLE SHEWING THE TOTAL NUMBER OF DEATHS AND THE DEATH RATE IN EACH DISTRICT DURING EACH QUARTER OF THE YEAR, also the Total Number of Deaths and the Death Rate in the City during the year 1898.

DISTRICTS.	1st QUARTER.		2nd QUARTER.		3rd QUARTER.		4th QUARTER.		Total No. of Deaths.	Death Rate per 1000.
	No. of Deaths.	Death Rate per 1000 per annum	No. of Deaths.	Death Rate per 1000 per annum	No. of Deaths.	Death Rate per 1000 per annum	No. of Deaths.	Death Rate per 1000 per annum		
Drypool	118	13·4	132	15·0	165	18·8	146	16·6	561	16·0
Sutton	78	22·2	49	14·0	88	25·1	47	13·4	262	18·7
East Sculcoates	69	18·4	77	20·5	100	26·6	75	20·0	321	21·4
West Sculcoates	204	17·7	159	13·8	211	18·3	152	13·2	726	15·7
Humber	203	20·8	165	16·9	219	22·4	199	20·4	786	20·1
Myton	228	19·4	188	16·0	284	24·1	243	20·6	943	20·0
Newington	115	20·0	89	15·4	128	22·2	92	16·0	424	18·4
Newland	28	14·0	29	23·0	21	10·5	22	11·0	100	12·5
Stoneferry	...	...	1	..	7	...	3	...	11	10·6
Marfleet	3	...	1	...	1	...	2	...	7	...
City total	1046	18·1	890	15·4	1224	21·2	981	17·0	4141	18·0

No. 8.—BIRTH RATE, DEATH RATE, AND ANALYSIS OF THE ZYMOTIC DEATH RATE IN TWENTY OF THE LARGEST TOWNS FOR THE YEAR ENDING DEC. 31ST, 1898.

CITIES AND BOROUGHS.	Population.	ANNUAL RATE PER 1000 LIVING.																			
		Births in 52 weeks ending 31st Dec. 1898.	Total Deaths 52 or 53 Weeks ending				Deaths from									Deaths under 1 year to 1000 Births.	Annual Rate of Mortality per 1000 living.		Percentage to total deaths.		
			28th Dec., 1895.	2nd Jan., 1897.	1st Jan., 1898	31st Dec., 1898.	Zymotic Diseases Total.	Small Pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fevers	Diarrhœa.	Violence.		Aged 1 to 60 years.	Aged 60 years and upwards.	Inquest cases.	Deaths in Public Institutions.	Uncertified causes of death
London	4,504.766	29·5	19·9	18·6	18·2	18·7	2·78	0·00	0·68	0·13	0·39	0·48	0·13	0·97	0·78	167	10·2	69·8	9·0	29·0	0·6
Liverpool	633,645	35·2	28·8	22·7	24·4	24·0	3·22	0·00	0·44	0·23	0·23	0·52	0·26	1·54	1·02	184	14·1	83·0	6·3	23·2	3·4
Manchester ...	539,079	32·7	25·2	22·6	23·1	21·9	3·11	—	0·50	0·12	0·10	0·32	0·23	1·84	0·77	197	12·3	82·6	7·3	20·0	0·8
Birmingham ...	510,343	34·0	20·3	20·8	21·6	20·0	2·78	—	0·36	0·09	0·26	0·49	0·22	1·36	0·72	191	10·4	70·9	5·0	17·6	2·9
Leeds	416,618	31·2	20·5	18·8	19·9	19·2	3·12	0·00	0·46	0·29	0·54	0·39	0·22	1·22	0·63	182	10·4	73·1	8·1	11·6	0·4
Sheffield.....	356,478	33·9	20·5	19·3	21·2	20·2	3·82	—	0·49	0·16	0·26	0·62	0·40	1·89	0·53	195	10·5	77·6	4·1	13·0	2·3
Bristol	316,900	28·6	18·1	16·9	17·2	17·2	2·69	—	0·97	0·04	0·14	0·36	0·08	1·10	0·55	164	8·7	65·4	7·9	16·2	0·7
West Ham.....	286,654	30·6	17·9	16·1	15·7	15·4	2·68	—	0·32	0·08	0·63	0·42	0·25	0·98	0·71	170	8·2	59·3	7·2	12·3	2·4
Nottingham ...	236,137	28·9	19·0	17·5	18·8	17·7	2·37	—	0·44	0·14	0·10	0·25	0·24	1·20	0·65	178	8·9	67·4	5·9	15·3	0·8
Bradford	233,737	24·0	19·9	16·5	17·4	17·6	2·12	—	0·45	0·05	0·07	0·29	0·21	1·05	0·55	185	9·7	74·3	6·4	12·3	1·2
Hull.....	**229.887**	**33·4**	**20·8**	**18·9**	**18·6**	**18·4**	**2·99**	—	**0·40**	**0·12**	**0·07**	**0·30**	**0·25**	**1·85**	**0·79**	**182**	**8·8**	**70·9**	**7·7**	**14·5**	**1·4**
Newcastle	223,021	31·7	20·5	18·5	19·1	21·4	2·84	0·01	0·57	0·11	0·13	0·62	0·30	1·10	1·00	190	12·0	85·1	8·2	17·5	0·7
Salford	215,702	34·7	25·6	22·6	23·9	22·7	4·03	—	0·46	0·29	0·15	0·60	0·37	2·16	0·67	212	12·5	79·7	6·2	16·4	1·0
Leicester	208,662	29·6	17·2	16·7	17·7	16·9	3·35	—	1·03	0·21	0·30	0·09	0·14	1·58	0·56	191	8·2	64·6	6·4	12·9	2·4
Portsmouth ...	186,618	26·7	17·8	16·6	16·2	16·3	2·16	—	0·37	0·17	0·30	0·23	0·23	0·86	0·52	156	8·6	60·4	6·3	16·5	1·0
Cardiff	177,770	31·1	18·2	16·8	14·9	14·8	2·24	—	0·28	0·05	0·73	0·24	0·10	0·84	0·47	158	7·9	57·3	6·7	11·9	0·7
Oldham	148,288	25·3	22·0	20·3	19·2	17·6	2·15	—	0·57	0·16	0·07	0·44	0·15	0·76	0·41	175	9·9	77·3	5·2	11·3	0·1
Sunderland.....	143,849	35·4	21·8	19·8	19·7	22·6	3·69	0·01	0·59	0·22	0·06	0·47	0·48	1·86	0·76	202	12·5	71·8	7·0	13·0	0·7
Blackburn	133,228	27·1	24·3	17·9	19·5	18·4	2·57	—	0·38	0·12	0·23	0·04	0·24	1·56	0·68	206	9·6	78·8	5·7	9·7	3·3
Croydon.....	124,421	25·4	14·5	14·2	13·1	13·9	1·99	—	0·27	0·07	0·14	0·28	0·09	1·14	0·44	150	6·1	63·5	8·1	17·1	—

Note.—In this Table when *no deaths* occurred, — is inserted.

No. 9.—DEATH-RATE from All Causes from the Principal Zymotic Diseases, and from Infantile Mortality, in the Twenty Great Towns, in the Ten Years, 1888-97 and in 1898.

Cities and Boroughs.	All Causes.		Small-Pox.		Measles.		Scarlet Fever.		Diphtheria.		Whooping-Cough.		Fever.		Diarrhœa.		Deaths under one year to 1000 Births	
	10 years, 1888-97	1898	10 years, 1888-97	1898	10 years, 1888-97	1898	10 years, 1888-97	1898	10 years, 1888-97	1898	10 years 1888-97	1898	10 years, 1888-97	1898	10 years, 1888-97	1898	10 years, 1888-97	1898
London	19·7	18·7	0·01	0·00	0·62	0·68	0·23	0·13	0·48	0·39	0·56	0·48	0·15	0·13	0·67	0·97	155	167
Liverpool	25·5	24·0	0·01	0·00	0·70	0·44	0·45	0·23	0·17	0·23	0·62	0·52	0·35	0·26	1·17	1·54	189	184
Manchester ...	24·8	21·9	0·02	—	0·80	0·50	0·35	0·12	0·26	0·10	0·61	0·32	0·26	0·23	1·10	1·84	185	197
Birmingham ...	20·7	20·0	0·05	—	0·51	0·36	0·23	0·09	0·21	0·26	0·55	0·49	0·16	0·22	1·11	1·36	180	191
Leeds	20·8	19·2	0·01	0·00	0·56	0·46	0·20	0·29	0·11	0·54	0·43	0·39	0·22	0·22	1·10	1·22	178	182
Sheffield	21·4	20·2	0·14	—	0·55	0·49	0·36	0·16	0·16	0·26	0·51	0·62	0·23	0·40	1·21	1·89	180	195
Bristol	18·5	17·2	0·03	—	0·46	0·97	0·15	0·04	0·13	0·14	0·45	0·36	0·12	0·08	0·50	1·10	144	164
West Ham ...	17·4	15·4	0·05	—	0·61	0·32	0·24	0·08	0·43	0·63	0·55	0·42	0·22	0·25	0·76	0·98	154	170
Nottingham ...	18·8	17·7	0·01	—	0·41	0·44	0·19	0·14	0·08	0·10	0·43	0·25	0·29	0·24	0·98	1·20	174	178
Bradford	19·5	17·6	0·07	—	0·46	0·45	0·24	0·05	0·07	0·07	0·43	0·29	0·15	0·21	0·87	1·05	171	185
Hull	**19·8**	**18·4**	**0·02**	—	**0·47**	**0·40**	**0·17**	**0·12**	**0·12**	**0·07**	**0·37**	**0·30**	**0·24**	**0·25**	**1·29**	**1·85**	**173**	**182**
Newcastle	20·6	21·4	0·00	0·01	0·50	0·57	0·14	0·11	0·20	0·13	0·50	0·62	0·15	0·30	0·69	1·10	167	190
Salford	24·5	22·7	0·01	—	0·99	0·46	0·47	0·29	0·41	0·15	0·75	0·60	0·41	0·37	1·40	2·16	198	212
Leicester	18·4	16·9	0·01	—	0·41	1·03	0·19	0·21	0·15	0·30	0·39	0·09	0·20	0·14	1·49	1·58	199	191
Portsmouth ...	17·4	16·3	0·00	—	0·46	0·37	0·09	0·17	0·17	0·30	0·33	0·23	0·23	0·23	0·82	0·86	150	156
Cardiff	18·4	14·8	0·01	—	0·44	0·28	0·21	0·05	0·31	0·73	0·47	0·24	0·17	0·10	0·82	0·84	160	158
Oldham	21·8	17·6	0·10	—	0·71	0·57	0·26	0·16	0·16	0·07	0·51	0·44	0·16	0·15	0·63	0·76	178	175
Sunderland ...	21·7	22·6	0·01	0·01	0·58	0·59	0·21	0·22	0·08	0·06	0·46	0·47	0·49	0·48	1·12	1·86	169	202
Blackburn	22·6	18·4	0·02	—	0·97	0·38	0·34	0·12	0·05	0·23	0·50	0·04	0·27	0·24	1·23	1·56	201	206
Croydon.....	14·4	13·9	0·00	—	0·36	0·27	0·07	0·07	0·29	0·14	0·39	0·28	0·11	0·09	0·47	1·14	128	150

Note.—In this table 0·00 indicates that the deaths were too few to give a rate of 0·005 ; when no death occurred — is inserted.

No. 10.—Returns made by the Vaccination Officers of the Hull and Sculcoates Unions respecting the VACCINATION of CHILDREN whose births were Registered during the year 1897.

Districts.	Births.	Successfully Vaccinated.	Insusceptible.	Dead Unvaccinated.	Postponement by Certificate.	Not accounted for.	Conscientious Objection Certificates.
Drypool	1360	1021	5	147	6	141	40
Sutton	617	437	3	87	5	64	21
East Sculcoates	537	438	2	69	6	12	10
West Sculcoates	1238	881	2	170	5	105	75
Humber	277	184	—	32	—	60	1
Myton	2282	1354	23	284	27	559	35
Newington	965	601	3	74	39	82	166
Newland	228	160	2	20	4	30	12
Marfleet	12	7	—	2	2	1	—
Totals	7516	5083	40	885	94	1054	360

Small Pox.

No death has been recorded from Small Pox during the year 1898. The average death-rate from Small Pox for the thirty-three great towns was 0·00 per 1000 per annum. The average number of deaths from Small Pox in the City during the past twenty years was 4 per annum.

During the year, four cases of Small Pox have been notified, and were admitted to Hospital (two upon the certificates of the Medical Officer of Health); of this number 3 were vaccinated and 1 doubtful.

The following table shews the incidence of the disease at different age periods amongst the three classes of patients treated in Hospital:—

Ages.	Vaccinated.		Unvaccinated.		Doubtful.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Under 1 year	1	..	...	...	...	...
Between 1 and 5 years	...	...	...	..	...	...
„ 5 and 15 „	...	...	...	...	...	...
„ 15 and 25 „	1	...	...	...	...	...
„ 25 and 45 „	1	...	...	...	1	...
„ 45 and 65 „	...	...	...	...	...	...
At 65 years and upwards	...	...	...	...	...	...
Totals	3	0	0	0	1	0

Scarlatina.

Twenty-seven deaths have been reported from Scarlatina during the year, being a mortality at the rate of 0·11 per 1000 per annum of the estimated population.

The average death-rate from Scarlatina for the thirty-three great towns was 0·14 per 1000 per annum. The deaths from Scarlatina were distributed over the four quarters of the year as follows, namely:—First quarter, 8; second quarter, 12; third quarter, 2; fourth quarter, 5, respectively.

The average number of deaths from Scarlatina in he City during the past twenty years was 86 per annum.

Measles.

Measles accounted for 79 deaths in 1898, as against 22 deaths in 1897 and 256 in 1896. The death-rate from Measles was equal to 0·34 per 1000 per annum of the estimated population. The average death-rate from Measles for the thirty-three great towns was 0·56 per annum. The deaths from Measles were distributed over the four quarters of the year as follows, namely :—First quarter, 38 ; second quarter, 30 ; third quarter, 5 ; fourth quarter, 6, respectively. The average number of deaths from Measles in the City during the past twenty years was 84 per annum.

Diphtheria.

There have been 10 deaths from Diphtheria, as against 19 in 1897 and 39 in 1896. The death-rate was equal to 0·04 per 1000 per annum. The average mortality from Diphtheria for the thirty-three great towns was 0·31 per annum. The deaths from Diphtheria were distributed over the four quarters of the year as follows, namely :—First quarter, 4 ; second quarter, 2 ; third quarter, 2 ; fourth quarter, 2. The average number of deaths from Diphtheria in the City during the past twenty years was 14 per annum.

Whooping Cough.

Whooping Cough occasioned 67 deaths, as against 57 in 1897 and 106 in 1896. The death-rate was equal to 0·29 per 1000 per annum. The average mortality from Whooping Cough for the thirty-three great towns was 0·42 per annum. The deaths from Whooping Cough were distributed over the four quarters of the year as follows, namely :—First quarter, 23 ; second quarter, 22 ; third quarter, 14 ; fourth quarter, 8, respectively. The average number of deaths from Whooping Cough in the City during the past twenty years was 78 per annum.

Fever.

This term embraces the three forms—Typhus, Typhoid, and Simple Continued Fever, and caused 57 deaths, being at the rate of 0·24 per 1000 of the estimated population. The average mortality from Fever for the thirty-three great towns was 0·20 per annum. The deaths were distributed over the four quarters of the year as follows, namely:—First quarter, 8; second quarter, 3; third quarter, 14; fourth quarter, 32, respectively. The average number of deaths from Fever in the City during the past twenty years was 49 per annum.

The advantages of notification of cases enabled us to take the usual sanitary precautions for the isolation of cases without proper accommodation, the daily supply of pails for the collection, disinfection, and disposal by cremation of the dejecta of Typhoid Fever patients treated at home, and the remedying of sanitary defects.

No. 12.—TABLE shewing the number of DEATHS from TYPHOID FEVER, with the Age, Sex and District in which they occurred, from the 1st January to the 31st December, 1898, inclusive.

Districts.	0 to 1.		1 to 5.		5 to 15.		15 to 25.		25 to 60.		60 to 80.		80 & up.		M.	F.	Total.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
Drypool	...	...	1	...	2	1	5	1	5	2	2	...	...	...	15	4	19
Sutton	...	...	...	1	...	...	...	...	1	2	...	...	...	...	1	3	4
E. Sculcoates ...	...	...	...	...	...	...	1	1	...	1	...	...	...	...	1	2	3
W. Sculcoates ...	...	...	1	...	2	...	...	2	...	...	...	...	...	...	3	2	5
Humber	...	...	...	...	1	...	3	1	2	1	...	...	...	...	6	2	8
Myton	...	...	1	...	1	1	1	1	2	1	...	1	...	...	5	4	9
Newington	...	...	...	1	...	2	1	1	...	2	...	...	1	...	2	6	8
Newland	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
Stoneferry	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marfleet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals.....	...	...	3	2	6	4	12	7	10	9	2	1	1	...	34	23	57

Diarrhœa.

Diarrhœa occasioned 365 deaths, a mortality of 1·58 per 1000 per annum of the estimated population. The average mortality from Diarrhœa for the thirty-three great towns was 1·22 per annum. The deaths from Diarrhœa were distributed over the four quarters of the year as follows, namely :—First quarter, 3 ; second quarter, 5 ; third quarter, 301 ; fourth quarter, 56, respectively. The average number of deaths from Diarrhœa in the City during the past twenty years was 2·33 per annum. The highest mortality from Diarrhœa in the thirty-three great towns was 1·84 in Manchester, 1·85 in Hull, 1·86 in Sunderland, 1·89 in Sheffield, 1·95 in Wolverhampton and 2·05 in Preston.

Infantile Diarrhœa.

Of 365 deaths from Diarrhœa, 325 were children, aged one year and under, and of this latter number, 259 died in the autumnal quarter, 235 of which were bottle-fed or had received a mixed diet, and 24 only had been breast-fed.

Investigations as set forth in the following table (No. 13) shew, as I have before stated, that the feeding of infants upon improper food is one of the chief causes of the increased autumnal Diarrhœal mortality.

Bills containing precautions against Diarrhœa, especially calling attention to the feeding of infants, have, as usual, been freely distributed.

SPECIAL REPORT

By the Medical Officer of Health, on the Increased Death Rate and its Cause.

The following Report from the Medical Officer of Health, namely :—

The increased death rate in this City during the third quarter has been due to Autumnal Diarrhœa.

The highest mortality in any given period was during the weeks ending September 24th and October 1st, the death rate

of the various Districts varying from 0·8 to 1·9; the greatest mortality for the three months being in the Districts of East Sculcoates, Sutton and Myton, the death rates being 1·9, 1·7 and 1·6 respectively.

Diarrhœa has been more fatal amongst children between the ages of three and eight months, and the fatality has been greater amongst males than females. (See Table A.)

The duration of illness has been from 5 to 8 days.

During the 1st and 2nd quarter of the year the general and zymotic death rates of children under one year to 1000 births was below the average of the 33 large towns, as shown in Table D. During the third quarter, however, the general and zymotic death rate of children under one year was above the average.

Diarrhœa has been generally distributed throughout the City, and most fatal in our artizan population.

As will be seen in Table A, out of the 301 deaths 274 have been bottle fed, or have received a mixed diet, and it is beyond doubt that the artificial feeding of infants, together with pollution of soil, either by vegetable or animal matter, is an important factor in increasing the prevalence and death rate from Diarrhœa.

In support of this, it is to be noted that amongst the Irish population the mortality has been less than in other portions of the community, and investigation has proved that it is attributable to children being almost invariably suckled.

I would further direct your attention to the question of house sanitary conveniences. In Table A you will notice that, of the 301 houses in which death has occurred, 288 were provided with privies, whilst only 13 were provided with water closets.

It has been generally observed that Infantile Diarrhœa is more prevalent in our crowded cities and densely-populated areas, the density of buildings upon an area, *i.e.*, crowded courts, obstructive buildings, overcrowding, and inefficient ventilation of rooms, together with foul air from cesspools,

privy middens, filthy accumulations of refuse, and want of cleanliness, is usually associated with the prevalence of Diarrhœa and mortality therefrom.

Meteorological conditions have also an important bearing upon the prevalence of Diarrhœa, and have for some considerable time been discovered to be associated with Diarrhœal epidemics. The temperature of the soil is an important factor in its causation.

During the period of the highest mortality in this City, the earth thermometer registered 59·8.

Infantile Diarrhœa occurs more or less every year, and the intensity of the epidemic varies from year to year, according to the changes in the temperature and rainfall.

The meteorological conditions of the recent Autumnal quarter has been unusual, and Diarrhœa has been universally prevalent. The temperature of July, generally speaking, was below the average, whilst in August and September the temperature exceeded the average considerably. In September the weather was remarkable for its small rainfall, unusual amount of sunshine, and an exceedingly hot period from the 2nd to the 17th.

On the whole, the temperature of the air during the quarter was 3·0° above the average. The amount of rainfall for the three months was below the average for 83 years, and the drought was greatest in the South-Eastern District of England.

Precautions Adopted.

The precautions that have been adopted in this City are as follows, namely:—Printed precautions have been distributed throughout the City; early notification of all fatal cases of Diarrhœa have been received from the Registrars of Births and Deaths; immediate investigation has been made of each case; an inspection of the sanitary arrangements of each house; the cleaning and limewashing of courts, and the flushing of the subsidiary drains where necessary; the bi-weekly collection of dry dust in our crowded neighbourhoods, the distribution

of printed precautions against undue accumulations of refuse and for the free distribution of disinfectants.

Recommendations.

The care of parents in the proper feeding of infants; the substitution of the water carriage system for the privy; the regular periodical removal and cremation of all accumulations of refuse from waste lands or crowded courts; the prevention of overcrowding; remedying of sanitary defects; the continuance of the closing of all insanitary property; and the opening out of areas under the provision of the Working Classes Act, would, in my opinion, tend to lessen the recurring prevalence and mortality due to Diarrhœa.

I append tables, shewing the prevalence of Diarrhœa in this City during the third Quarter, and the meteorological conditions; and also deaths from Diarrhœa during the years 1883 to 1898 inclusive.

J. Wright Mason, M.B., D.P.H., &c.
Medical Officer of Health.

Town Hall, Hull,
November, 1898.

TABLE A.—Shewing the Number of Deaths from Diarrhœa during the Third Quarter of the Year 1898, together with the Age Periods, Nature of Food, &c.

District.	Population.	Ages.							Sex.		Total number of Deaths.	Food.		No. of Rooms in Houses where Death has occurred.					Sanitary Conveniences.	
		0 to 1	1 to 5	5 to 15	15 to 25	25 to 60	60 to 80	80 and up	Males.	Females.		Breast Fed.	Bottle Fed & Mixed Diet.	2	3	4	5	6	W.C.	Privies.
Drypool.....	35548	41	4	...	...	...	1	...	25	21	46	4	42	13	1	28	1	1	...	46
Sutton	14531	20	4	...	...	...	1	...	13	12	25	...	25	4	6	11	2	1	...	25
East Sculcoates..	15127	25	4	...	...	...	...	...	16	13	29	2	27	2	2	20	1	1	1	28
West Sculcoates.	46041	39	...	...	...	...	1	...	25	15	40	3	37	9	5	24	2	...	3	37
Humber	39061	29	4	...	...	...	...	2	20	15	35	2	33	15	5	12	3	...	3	32
Myton	46859	61	13	...	...	...	3	...	39	38	77	8	69	16	13	35	6	2	5	72
Newington	23047	33	1	...	...	1	1	...	16	20	36	6	30	6	5	24	...	...	1	35
Newland	8345	7	1	...	...	...	...	...	4	4	8	1	7	...	1	6	2	...	...	8
Stoneferry	1035	4	1	...	...	...	...	...	2	3	5	1	4	...	2	2	1	...	...	5
Marfieet	293	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	229887	259	32	...	...	1	7	2	160	141	301	27	274	65	40	173	18	5	13	288

TABLE B.—Shewing Deaths from all Causes, Birth Rate, Death Rate, Zymotic and Diarrhœa Death Rates, and Meteorological Report, from July 9th to October 1st, 1898.

Fortnight.	Deaths from Diarrhœa.							Total Deaths.		Birth Rate.	Death Rate from all Causes.	Death Rate from the Seven Zymotic Diseases.	Barometer.	Thermometer.		Hygrometers.			
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 60	60 to 80	80 up	Number.	Death Rate.					Maximum	Minimum	Dry Bulb.	Wet Bulb.	Humidity	Rainfall.
July 9th...	2	1	...	...	...	...	...	3	0·3	34·7	14·4	1·1	30·096	65·9	48·5	60·8	55·8	73·8	0·56
,, 23rd...	3	...	...	...	...	...	...	3	0·3	31·4	11·5	0·7	30·105	69·2	50	65·5	58·2	78	0·11
Aug. 6th...	9	2	...	...	...	...	...	11	1·2	30·8	14·5	1·3	30·047	68·2	50·4	61·5	57·2	76·4	2·00
,, 20th...	39	1	...	...	...	1	...	41	4·6	34·1	18·3	5·4	30·068	69·5	52·3	62·2	59·4	85·1	0·47
Sept. 3rd...	64	11	...	...	...	1	...	76	8·5	38·6	27·4	9·0	30·096	68·2	50·6	60·7	56·9	77·5	1·27
,, 17th...	67	8	...	...	...	3	...	78	8·8	33·5	29·8	9·4	30·156	73·8	53·8	65·3	61·8	80·1	0·04
Oct. 1st...	74	6	2	...	1	2	2	87	9·8	32·5	30·0	10·9	30·075	62	41·9	55·5	52	78	0·22

No. 13.— TABLE C.— Shewing TOTAL NUMBER of DEATHS from DIARRHŒA, also the number of deaths of Children in the Autumnal quarters, during the years 1883 to 1898 inclusive.

Year.	Total Number of Deaths.	Number of Deaths aged one year and under.	No. of Deaths during Autumnal quarter, aged one year and under.	Bottle Fed and Mixed Diet.	Breast Fed.
1883	119	90	73	58	15
1884	331	271	222	171	51
1885	59	43	23	18	5
1886	262	193	155	141	14
1887	214	170	154	124	30
1888	86	59	39	33	6
1889	213	157	131	109	22
1890	183	140	89	72	17
1891	122	100	81	65	16
1892	176	131	106	98	8
1893	474	373	343	300	43
1894	72	59	32	26	6
1895	524	399	343	299	44
1896	191	154	133	108	25
1897	451	368	338	290	48
1898	365	325	259	235	24
Totals.	3842	3032	2521	2147	374

TABLE D.—Shewing the Average General and Zymotic Death Rate per 1000 Persons Living and Deaths of Children under One Year, to 1000 Births, during the 1st, 2nd and 3rd Quarters of the Year, for the 33 Large Towns as Compared with this City.

	1st Quarter.			2nd Quarter.			3rd Quarter.		
TOWN.	Death Rate.	Zymotic Death Rate.	Deaths of Children under One Year of Age to 1000 Births.	Death Rate.	Zymotic Death Rate.	Deaths of Children under One Year of Age to 1000 Births.	Death Rate.	Zymotic Death Rate.	Deaths of Children Under One Year of Age to 1000 Births.
33 Large Towns	20·6	2·38	145	17·1	1·88	133	20·3	4·94	275
Hull	18·9	1·72	140	15·6	1·52	115	21 7	6·48	310

TABULATED STATEMENT SHEWING THE ESTIMATED POPULATION, VITAL STATISTICS, SANITARY ARRANGEMENTS OF HOUSES, AND THE PRECAUTIONS TAKEN FOR THE PREVENTION OF DISEASES IN THE REGISTRATION SUB-DISTRICTS OF THE CITY AND COUNTY OF KINGSTON UPON HULL, FOR THE YEAR 1898.

DISTRICTS.	VITAL STATISTICS.										DEATH RATE OF SPECIAL DISEASES.															PREVENTION OF DISEASE.		
								DEATH RATE.			NON-ZYMOTIC.				ZYMOTIC.													
																					DIARRHŒA.							
	Estimated Population.	No. of Persons per acre.	No. of Houses.	Average No. of Persons per House.	Percentage of W.C.'s.	Percentage of Privies.	Birth Rate.	Non-Zymotic.	Zymotic.	Total.	Bronchitis.	Phthisis.	Pnuemonia.	Other Causes.	Measles.	Scarlatina.	Croup and Diphtheria.	Whooping Cough.	Enteric Fever.	Small Pox.	Breast Fed.	Bottle Fed and Mixed Diet.	Total.	Puerperal Fever.	Other Causes.	Removals to Hospitals.	Houses Disinfected by Local Authority.	Notifications.
Drypool	35548	20	8642	4	4·1	96·5	38·8	13·0	3·2	16·2	1·1	0·8	0·6	10·3	0·2	0·4	0·1	0·08	0·7	....	0·1	1·4	1·5	0·05	0·02	79	249	921
Sutton	14531	48	3248	4	5·1	99·1	39·7	16·4	3·5	19·9	2·0	0·6	1·6	12·1	0·3	0·07	....	0·4	0·2	....	....	2·2	2·2	....	0·1	10	50	309
E. Sculcoates..	15127	54	3910	3	8·8	96·2	33·8	15·6	3·7	19·4	3·0	0·6	0·6	11·3	0·5	0·06	0·06	0·5	0·1	....	0·1	2·1	2·2	....	0·1	15	142	345
W. Sculcoates	46041	95	10156	4	13·5	88·2	24·9	13·3	1·8	15·2	1·4	1·4	0·5	9·8	0·4	0·02	0·06	0·3	0·06	....	0·06	0·8	0·9	....	0·1	64	292	718
Humber	39061	96	9461	4	30·9	71·4	22·5	18·0	1·9	20·0	1·7	1·4	0·9	13·7	0·3	....	0·05	0·1	0·1	....	0·05	1·1	1·1	....	0·1	55	155	502
Myton	46859	77	12196	3	10·6	91·8	35·8	14·7	3·0	17·8	1·9	1·1	1·0	10·6	0·2	0·1	0·1	0·3	0·1	....	0·1	1·7	1·8	....	0·1	59	223	739
Newington ...	23057	16	6590	3	22·6	80·3	38·5	14·3	3·4	17·8	1·3	1·1	1·0	10·7	0·3	0·1	0·1	0·4	0·2	....	0·3	1·6	1·9	....	0·1	18	103	443
Newland	8345	4	2349	3	49·5	71·6	31·5	10·7	1·6	12·3	1·1	1·0	0·6	8·2	0·1	....	0·1	....	....	....	0·1	1·1	1·2	....	0·1	21	162	310
Stoneferry ...	1035	0	239	4	8·3	94·1	16·0	4·0	6·0	10·0	1·0	....	....	3·0	....	1·0	....	....	....	....	1·0	4·0	5·0	....	....	...	12	91
Marfleet	293	0	71	4	7·0	97·1	24·0	21·0	....	21·0	....	....	....	28·0	....	....	....	....	....	....	....	....	....	....	....	...	...	3

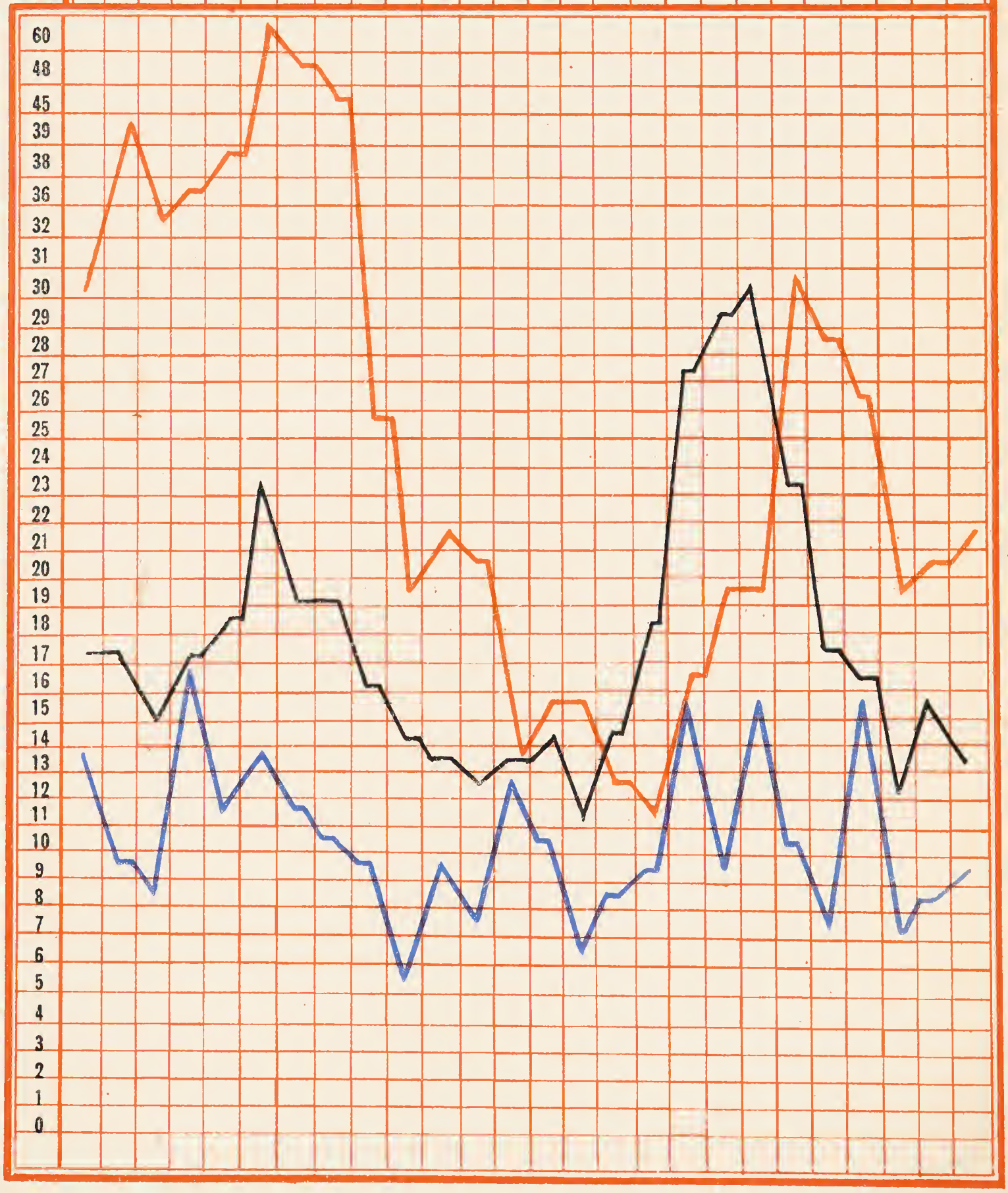
No. 14.—Table shewing the Population and Deaths from Diarrhœa during the Third Quarters of the years 1872 to 1898, both inclusive; also the total Rainfall in inches and Temperature for the same period.

			JULY.				AUGUST.				SEPTEMBER.			
Years.	Population.	Deaths from Diarrhœa.	Mean of Maximum.	Highest Reading.	Date.	Total Rainfall	Mean of Maximum.	Highest Reading.	Date.	Total Rainfall.	Mean of Maximum.	Highest Reading.	Date.	Total Rainfall.
			°	°		ins.	°			ins.	°	°		ins.
1872	125,210	218	73·1	86	21	4·84	67·9	77	26	2·24	62·8	76	4	3·80
1873	128,225	161	73·2	84	21,23	3·52	68·7	77	8	3·10	61·4	70	1	2·18
1874	131,315	161	73·2	84	9	1·79	67·9	78	19	2·56	64·4	74	1	3·03
1875	134,480	160	66·1	72	2	3·96	69·7	83	16	4·06	65·0	72	7	2·65
1876	137,630	193	73·9	87	16	3·49	69·5	83	14	1·50	61·4	69	5,22	3·12
1877	141,050	145	69·2	75	10,30,11	2·61	66·1	74	5	4·90	59·1	67	11	4·46
1878	144,450	336	71·3	86	20	0·88	69·1	73	2,7,8,12,18	5·31	63·7	73	6	2·81
1879	147,940	18	65·3	78	28,30	3·51	66·2	73	20	6·54	62·2	72	7	2·57
1880	151,500	208	67·2	75	25	4·57	69·3	77	10	1·87	66·4	76	5	5·05
1881	155,160	109	69·1	85	4	2·79	65·1	83	5	6·45	61·8	71	19	3·34
1882	158,814	227	71·1	76	27,28	1·98	69·2	79	11	3·18	65·0	72	8,10	1·60
1883	176,296	73	69·0	75	7,8,9,31	3·15	69·9	77	13	1·33	63·6	72	17	4·29
1884	181,225	273	71·3	81	2	2·13	75·7	85	24	1·46	65·9	77	17	1·09
1885	186,292	26	68·8	84	25	0·56	62·5	74	16	2·01	61·2	71	15	2·46
1886	191,501	201	68·5	82	3,4	2·52	68·4	80	30	2·10	63·2	74	14	1·06
1887	196,855	188	73·0	83	8	1·13	69·0	80	6	1·57	59·3	68	3	2·55
1888	202,359	39	62·0	71	22,23	5·75	65·5	79	9	2·41	60·5	69	3	1·59
1889	208,017	168	64·8	70	31	1·38	65·7	70	1	4·03	64·3	71	9,10,11	1·38
1890	213,833	122	67·3	72	31	1·57	65·1	71	4,5	3·12	66·2	69	8,10	1·44
1891	200,934	81	68·1	79	17	2·87	64·9	71	2,19	3·79	66·2	82	10	1·30
1892	204,750	139	66·1	72	2	1·67	67·8	73	21	2·85	64·4	68	27	1·34
1893	208,639	431	68·5	77	2,8	2·37	73·9	93	18	2·21	64·3	77	45	1·81
1894	212,679	35	69·9	80	5	2·23	65·7	71	30	2·22	58·3	69	11	0·84
1895	216,722	442	69·1	82	8	5·61	70·5	79	21	3·65	70·0	78	2,9	1·08
1896	220,844	155	72·4	85	20	1·16	65·0	72	12,13	2·78	61·8	70	13	3·83
1897	225,045	399	69·6	80	23	0·40	71·2	81	5	2·79	61·1	69	24	3·21
1898	229,887	301	67·3	74	22,31	0·50	69·2	81	12	3·71	68·2	85	17	0·26

CHART shewing the number of DEATHS from DISEASES of the RESPIRATORY ORGANS, and CONSUMPTION, together with the DEATH RATE from all causes, and the TEMPERATURE and RAINFALL in fortnights, 1898.

Death Rate—
Respiratory Organs—
Consumption—

	JAN.		FEB.		MAR.		APRIL			MAY		JUNE		JULY		AUG.		SEP.		OCT.			NOV.		DEC.	
TEMPERATURE MAXIMUM	53·0	55·0	56·0	55·0	48·8	58·0	54·0	68·0	61·0	63·0	64·0	70·0	71·0	75·0	74·0	77·0	81·0	75·0	85·0	85·0	66·0	65·0	61·0	55·0	58·0	56·0
TEMPERATURE MEAN	42·6	41·6	42·8	41·5	37·3	40·8	38·9	47·5	44·8	48·6	47·4	52·4	56·0	45·0	59·6	59·3	60·9	59·4	63·8	53·3	51·9	52·9	47·7	44·1	44·0	42·1
TEMPERATURE MINIMUM	28·0	29·0	28·0	30·0	24·0	25·0	27·0	27·0	30·0	36·0	34·0	34·0	37·0	57·4	40·0	44·0	44·0	44·0	48·0	37·0	35·0	39·0	36·0	26·0	30·0	29·0
Rainfall in Inches	0·85	..	0·69	0·43	0·53	0·25	0·95	2·04	0·84	0·99	0·53	0·98	0·75	0·56	0·11	2·00	0·47	1·27	0·04	0·22	0·30	2·83	0·56	1·61	0·86	0·21



Disease Map.

I append to my Report a Map of the City, shewing the distribution of deaths from Diarrhœa, Whooping Cough, Scarlatina, Typhoid Fever, Measles and Diphtheria.

Bacteriology.

During the year an arrangement has been entered into with the Council of the Yorkshire College, Leeds, for the conducting, by Professor Trevelyan, of all bacteriological investigations required, of such cases of Diphtheria and Typhoid Fever, which the City Medical Officer of Health and the Medical Practitioners of Hull may, through him, think necessary, and also for such examinations of samples of milk suspected of tubercle or other infection, water and other foods, submitted by your Medical Officer of Health for Bacteriological and Chemical research.

The cost of the Bacteriological researches is defrayed by the City Corporation, and they have proved to be of great benefit in the diagnosis of doubtful cases of Diphtheria and Typhoid Fever.

Hospitals.

Three hundred and ninety-five patients have been treated in the Hospitals. Of this number 321 have been admitted during the year 1898, as against 562 in 1897 and 507 in 1896. Twenty-nine per cent. of the notified cases of Small Pox, Scarlet Fever, and Typhoid Fever were treated in Hospital, as against 31 per cent. in 1897 and 28 per cent. in 1896.

The admissions were distributed over the four quarters of the year as follows, namely :—

First quarter, 100 ; second quarter, 74 ; third quarter, 42 ; fourth quarter, 105.

Of these 221 were suffering from Scarlatina, 86 from Typhoid Fever, 5 from Measles, 4 from Small Pox, 1 from Choleraic Diarrhœa, and 4 were admitted for Isolation.

Twenty deaths have occurred from Typhoid Fever, aged 73, 46, 36, 34, 30, 30, 29, 27, 24, 22, 22, 22, 19, 17, 16, 16, 15, 12, 12, and 12 years ; duration of illness, 20, 2, 52, 6, 28, 20, 8, 2, 9, 14, 13, 7, 32, 10, 21, 3, 6, 30, 9, and 2 days respectively.

Ten deaths have occurred from Scarlatina, aged 11, 6, 6, 6, 5, 4, 4, 4, 4, and 3 years ; duration of illness, 14, 98, 18, 15, 11, 61, 34, 19, 2, and 8 days respectively.

The average daily number of patients in the Hospitals was 46 and the average stay of each patient was 43 days. The average cost of treatment of each patient was £10 11s. 10d.

The average cost per day per patient was 4s. 11d.

The percentage of deaths from all causes to the total admissions was equal to 9 per cent., as against 6 per cent. during the year 1897 and 4 per cent. during the year 1896.

During the year daily papers have been received from the Public Libraries, and many other kind friends have generously subscribed presents for the use of the patients, which have received your Committee's grateful acknowledgments.

The following table shews the number of Cases Admitted into the Hospitals in age periods, and the diseases from which they were suffering :—

Diseases.	Ages.									Totals.
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 upwards.	
Small Pox ...	...	1	...	1	1	1	...	...	...	4
Measles	...	1	2	2	...	...	...	...	...	5
Scarlatina.....	...	62	134	17	6	1	...	1	...	221
Typhoid Fever	...	1	33	29	16	3	3	...	1	86
Isolation	...	...	1	...	...	2	1	...	...	4
Chol. Diarr....	...	...	...	...	...	...	1	...	...	1
Totals.....	...	65	170	49	23	7	5	1	1	321

Extension of the Sanatorium.

The accommodation at the Sanatorium being insufficient, plans have been submitted by the City Engineer for alterations and additions to the Administrative Block. The work is now in progress, and when completed will enable your Authority to provide accommodation for the isolation of Diphtheria patients.

No. 15.—TABLE shewing the Number of ADMISSIONS into the Hospitals of the Urban Sanitary Authority during the year 1898, with the Nature of the Diseases, the number of Deaths, and the Districts from which they were removed.

DISEASES	Drypool	Sutton	East Sculcoates	West Sculcoates	Humber	Myton	Newington	Newland	Stone-ferry	Mar-fleet	Total Admissions
Small Pox	1	...	...	2	1	...	...	...	...	...	4
Measles	3	...	...	...	2	...	...	...	...	...	5
Scarlatina	38	8	14	62	24	48	12	15	...	...	221
Typhoid Fever	35	2	2	7	23	11	5	1	...	...	86
Choleraic Diarrhœa	...	...	...	...	1	...	...	...	...	...	1
Isolation	3	...	...	...	1	...	...	...	...	...	4
Totals	80	10	16	71	52	59	17	16	...	...	321
Deaths in Hospital—											
Small Pox	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	...	...	...	...
Scarlatina	...	...	2	3	2	2	1	...	...	...	10
Typhoid Fever	9	1	...	2	2	3	3	...	...	...	20
Total Deaths	9	1	2	5	4	5	4	...	...	...	30

No. 16.—The following TABLE gives the NUMBER OF ADMISSIONS INTO THE HOSPITALS of the Urban Sanitary Authority from 1879 to 1898.

Diseases.	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	Totals
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	2	12	...	...	...	...	...	14
Small Pox	...	1	16	85	45	144	65	...	9	150	6	22	2	10	178	34	4	4	7	4	786
Measles	...	2	3	10	3	...	...	3	4	...	31	4	13	12	24	21	...	2	7	5	144
Scarlatina	3	12	122	88	68	14	192	251	351	323	198	114	77	192	286	291	494	400	481	221	4178
Diphtheria	...	...	...	...	1	1	..	5	4	5	4	11	11	13	9	10	12	2	...	...	88
Whooping Cough	...	...	...	...	...		...	...	...	...	2	...	...	...	...	...	...	...	...	...	2
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Typhoid Fever	...	2	5	2	7	...	4	4	9	8	55	33	55	36	210	86	98	97	67	86	864
Chol. Diarrhœa	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	...	...	...	...	1	8
Diarrhœa	...	...	...	...	...	...	...	2	. .	...	...	...	...	7	5	...	1	...	...	...	15
Croup	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	2
Continued Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	2
Erysipelas	...	...	...	...	...	...	...	...	...	...	...	8	1	1	1	1	...	...	...	...	12
Dysentery	...	...	..	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	2
Isolation	...	...	...	...	...	...	...	...	...	...	17	12	7	9	6	1	1	2	...	4	59
Totals	3	17	146	185	124	160	261	265	377	487	314	204	168	284	738	444	610	507	562	321	6177

Constitutional Diseases.

Phthisis caused 270 deaths, as against 285 in 1897 and 264 in 1896; the death-rate in 1898 being equal to 1·1 per 1000 per annum, as against 1·2 in 1897 and 1·1 in 1896.

Cancer contributed 170 deaths, being most fatal between the ages of 45 and 65.

Other constitutional diseases caused 231 deaths.

Developmental Diseases.

Under this heading 303 deaths have been recorded as against 313 in 1897, the principal causes of death being from Old Age, 212; Premature Birth, 91.

Diseases of the Nervous System.

Four hundred and two deaths have been recorded under this heading, as against 4·59 in 1897, and include 160 from Convulsions, and 154 from Apoplexy, Brain Paralysis, &c. The greater number of the former occurred in young children, aged 1 year and under.

Diseases of the Circulatory System.

These diseases caused 384 deaths, as against 304 in 1897. Three hundred and forty-three of the deaths were due to diseases of the heart.

Diseases of the Respiratory System.

These diseases (other than Consumption) caused 695 deaths, as against 597 in 1897, of which 410 were due to Bronchitis and 191 to Pneumonia.

Influenza.

During the year 54 deaths were certified to be due to Influenza.

The following Tabulated Statement shews Number of Deaths from Influenza, in fortnights, and the Districts in which they occurred, during the year, 1898.

Fortnight ending	Drypool	Sutton	East Sculcoates	West Sculcoates	Humber	Myton	Newington	Newland	Stoneferry	Marfleet	Totals
Jan. 8...	...	...	...	...	...	...	...	...	...	...	...
,, 23...	...	...	...	...	...	...	...	...	...	...	...
Feb. 5...	...	...	...	...	...	...	...	...	...	...	...
,, 19...	...	...	...	2	...	...	...	1	...	...	3
March 5...	...	...	1	1	...	1	1	...	...	...	4
,, 19...	...	...	...	2	...	...	...	...	...	...	2
April 2...	...	...	...	...	1	...	...	...	...	...	1
,, 16...	...	...	1	1	...	...	...	...	...	...	2
,, 30...	...	...	...	...	1	...	...	..	...	...	1
May 14...	...	...	1	...	...	...	...	...	...	...	1
,, 28...	...	...	...	...	...	...	...	...	...	...	...
June 11...	...	...	...	...	...	...	...	...	...	...	...
,, 25...	...	...	...	...	...	...	...	...	...	...	...
July 9...	...	...	...	...	1	...	...	...	...	...	1
,, 23...	...	...	...	...	...	1	...	...	...	...	1
Aug. 6...	...	...	...	...	...	...	...	...	...	...	...
,, 20...	...	...	...	...	...	...	...	...	...	...	...
Sept. 3...	...	...	...	...	...	...	...	...	...	...	...
,, 17...	...	...	...	...	...	...	...	...	...	...	...
Oct. 1...	...	...	...	...	...	...	1	...	...	...	1
,, 15...	1	...	...	...	...	...	...	...	...	...	1
,, 29...	...	...	...	...	...	...	...	...	...	...	...
Nov. 12...	...	...	...	...	...	...	...	...	...	...	...
,, 26...	...	...	...	...	...	...	...	...	...	...	...
Dec. 10...	...	...	...	...	...	...	...	...	...	...	...
,, 24...	...	...	...	...	...	...	1	...	...	...	1
Total ...	1	...	3	6	3	2	3	1	...	...	19

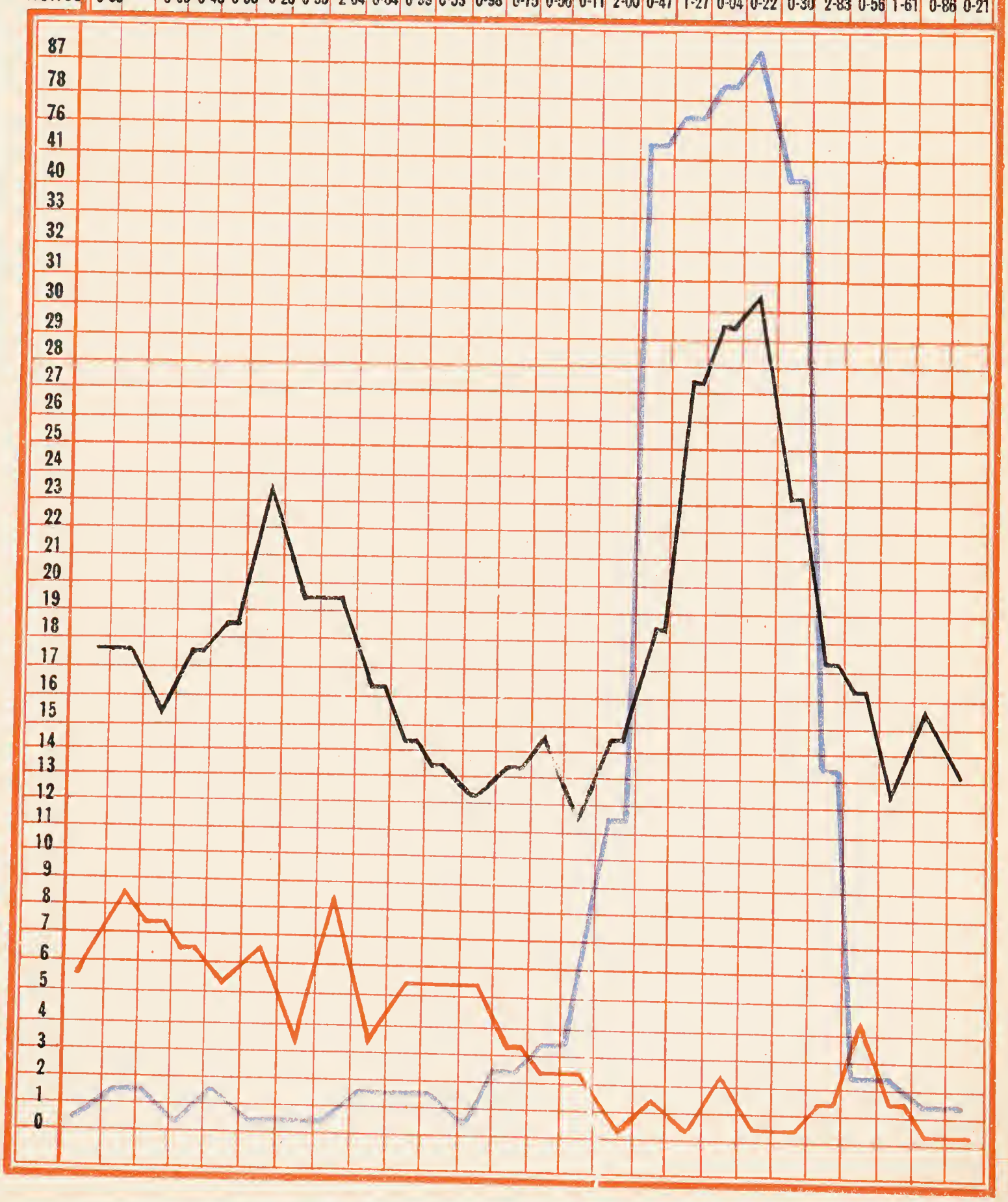
TABULATED STATEMENT.

District.	Influenza.										Influenza accompanied by diseases of the Respiratory Organs (Bronchitis, Pneumonia).										Diseases of the Respiratory Organs (Bronchitis, Pneumonia, Phthisis).										Total Deaths.		
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 55	55 to 75	75 and upwards.	Males.	Females	Total.	0 to 1	1 to 5	5 to 15	15 to 25	25 to 55	55 to 75	75 and upwards.	Males.	Females	Total.	0 to 1	1 to 5	5 to 15	15 to 25	25 to 55	55 to 75	75 and upwards.	Males.	Females	Total.	Males.	Females	Total.
Drypool	...	...	...	...	1	...	...	...	1	1	...	...	...	...	5	4	...	5	4	9	19	7	...	11	34	20	4	47	48	95	52	53	105
Sutton	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	2	1	3	12	11	1	2	15	12	4	24	33	57	26	34	60
East Sculcoates	...	...	...	...	1	2	...	2	1	3	...	...	...	...	3	...	...	2	1	3	15	11	1	2	12	24	3	40	28	68	44	30	74
West Sculcoates	1	...	...	...	1	4	...	1	5	6	1	...	1	...	2	...	2	4	2	6	29	16	3	13	45	40	10	82	74	156	87	81	168
Humber	...	...	...	...	...	...	3	...	3	3	...	...	...	...	1	2	...	1	2	3	40	13	6	13	60	37	12	100	81	181	101	86	187
Myton	...	...	...	...	1	1	...	2	...	2	...	...	...	1	3	2	...	2	4	6	57	24	5	14	51	44	13	128	80	208	132	84	216
Newington	...	...	...	...	1	1	1	...	3	3	...	...	...	...	2	2	...	1	3	4	27	14	1	9	18	14	2	47	38	85	48	44	92
Newland	...	...	...	...	...	1	...	1	...	1	...	...	...	...	1	...	...	...	1	1	5	2	1	4	2	3	3	10	10	20	11	11	22
Stoneferry	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1	1	...	1
Marfleet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	1	...	...	...	5	9	4	6	13	19	1	...	1	1	18	11	3	17	18	35	205	98	18	68	237	194	51	479	392	871	502	423	925

CHART shewing the number of DEATHS from prevailing ZYMOTIC DISEASES, and the DEATH RATE from all causes, together with the TEMPERATURE and RAINFALL in fortnights. 1898.

Death Rate—
Diarrhœa—
Measles—

	JAN.		FEB.		MAR.		APRIL			MAY		JUNE		JULY		AUG.		SEP.		OCT.			NOV.		DEC.	
TEMPERATURE MAXIMUM	53-0	55-0	56-0	55-0	48-8	58-0	54-0	68-0	61-0	63-0	64-0	70-0	71-0	75-0	74-0	77-0	81-0	75-0	85-0	85-0	66-0	65-0	61-0	55-0	58-0	56-0
TEMPERATURE MEAN	42-6	41-6	42-8	41-5	37-3	40-8	38-9	47-5	44-8	48-6	47-4	52-4	56-0	45-0	59-6	59-3	60-9	59-4	63-8	53-3	51-9	52-9	47-7	44-1	44-0	42-1
TEMPERATURE MINIMUM	28-0	29-0	28-0	30-0	24-0	25-0	27-0	27-0	30-0	36-0	34-0	34-0	37-0	57-4	40-0	44-0	44-0	44-0	48-0	37-0	35-0	39-0	36-0	26-0	30-0	29-0
Rainfall in Inches	0-85	..	0-69	0-48	0-58	0-25	0-95	2-04	0-84	0-99	0-53	0-98	0-75	0-56	0-11	2-00	0-47	1-27	0-04	0-22	0-30	2-83	0-56	1-61	0-86	0-21



Violence.

One hundred and forty-two lives were lost by accident or negligence, as against 139 in 1897. Deaths from accidents or negligence of all kinds, including Homicide or Suicide, caused 176 deaths, being equal to 4·2 per cent. of the total deaths. The number of deaths from Drowning was as follows, viz. :—37 as against 34 in 1897 and 46 in 1896.

Inquests.

The number of deaths which have formed the subject of a Coroner's inquiry was 323, as against 378 in 1897 and 237 in 1896. The Coroner also investigated the circumstances attending the deaths of 57 persons (33 males and 24 females), in which he did not consider it necessary to hold inquests.

The following table shews the number of Inquests held in Kingston upon Hull, from the 1st January to 31st December, 1898, and the months in which they have occurred :—

	Males.	Females.	Total.
January	21	10	28*
February	9	12	21
March	17	12	29
April	26	8	34
May	17	3	20
June	17	4	21
July	10	10	20
August	23	10	33
September ...	26	3	29
October	17	11	28
November... ...	18	14	32
December	15	10	25
	216	107	320

* This total of 28 included an inquest on 4 bodies, viz. :—Sculcoates disaster.

Ill-defined and not Specified Causes.

Four hundred and sixty-nine deaths are classified under this heading, the majority being from Debility and Uncertified causes of death, as against 400 in 1897, and 436 in 1896.

Uncertified Deaths.

During the year 40 deaths were not certified, either by a registered medical practitioner or by the Coroner, as against 64 in 1897 and 75 in 1896, being at the rate of 0·9 per cent. of the total deaths. In London the proportion was only 0·6 per cent. of the total deaths, whilst it averaged 1·3 in the thirty-two other great towns. The causes of all the deaths in Croydon and in Derby during the year 1898 were certified; among the other great towns the lowest proportions of uncertified deaths were 0·3 in Bolton and Gateshead, 0·4 in Leeds, and 0·5 in Brighton ; the highest proportions were 3·4 in Liverpool, 3·3 in Blackburn, 2·9 in Birmingham and in Preston, and 2·7 in Halifax.

Sanitation.

During the year six thousand nine hundred and four houses have been examined in the house-to-house inspection. Three thousand eight hundred and fifty visits and inspections have been made to ascertain if works ordered by notices were in progress, and to examine houses respecting which complaints had been reeeived.

One thousand six hundred and seventy-two visits have been made to Common Lodging Houses, including day and night visits. One thousand and eighty-five inspections were made of shops where milk was sold; four thousand seven hundred and ninety-seven cases of infectious disease were investigated, three hundred and twenty-one patients removed to the Hospitals, and two thousand three hundred and forty-one houses disinfected.

Housing of the Working Classes Act, 1890.

Your Committee, have at the various fortnightly meetings, been furnished with special reports upon insanitary properties

The following TABLE shews the NUMBER OF HOUSES CLOSED AND RE-OCCUPIED, in districts, during the undermentioned years :—

	1891		1892		1893		1894		1895		1896		1897		1898	
Dist.	Houses closed.	Re-occupied.	Houses closed.	Re-occupied.	Houses closed.	Re-occupied.	Houses closed.	Re-occupied.	Houses closed.	Re-occupied.	Houses closed.	Re-occupied.	Houses closed.	Re-occupied.	Houses Closed.	Re-occupied.
1	20	—	99	3	7	7	—	—	—	—	8	—	—	—	1	11
2	16	—	30	—	5	—	—	8	—	—	—	7	3	—	53	2
3	11	—	100	5	134	—	113	41	8	14	2	1	5	13	3	5
4	14	—	14	—	15	—	8	10	51	—	7	—	2	—	...	...
	61	—	243	8	161	7	121	59	59	14	17	8	10	13	57	18

Destructor.

The following table shews the number of loads destroyed during the undermentioned years:—

Year.	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898
No. of Loads	4119	4184	4759	4409	4493	4922	6129	9382	9251	7997	10011	10734	13587	15706

In consequence of the present Destructor being insufficient to deal with the large accumulations of refuse, representations have been made to your Committee, and a special report in respect to the providing of an additional Destructor, and also dealing with the various types of Destructors in general, was presented and duly considered.

A site was subsequently acquired in the Western District; a Beaman & Deas Destructor, together with a Washington-Lyons Disinfector, have been recommended for adoption; and plans are being arranged for a proper and efficient Disinfecting Station, with receiving rooms, bath rooms and discharge rooms.

The latter will enable families exposed to infection to be removed for isolation and bathed, whilst their houses, clothing, &c., are being disinfected.

Epizootic Disease.

There have been 29 outbreaks of Swine Fever. One hundred and thirty-six animals have been affected, some of which died from the disease, and the remainder slaughtered, also 252 animals were in contact.

The carcases of the affected animals were condemned, and removed to the Destructor for cremation.

Public Mortuary.

Table shewing the number of bodies admitted, inquests, and post-mortems held, and funerals that have taken place from the Mortuary during the year 1898:—

Month.	Bodies Admitted.			No. of Post-Mortems.			No. of Inquests.	No. of Funerals.	No. of Drowning cases.		
	Males.	Females.	Total.	Males.	Females.	Total.			Males.	Females.	Total.
January	10	4	14	8	2	10	13	6	5	1	6
February	7	5	12	3	5	8	10	5	1	...	1
March	6	3	9	5	3	8	9	2	1	...	1
April	11	4	15	10	4	14	14	5	4	1	5
May	12	1	13	8	1	9	10	1	2	...	2
June	6	1	7	1	1	2	7	5	3	...	3
July	6	3	9	4	2	6	7	3	1	...	1
August	11	3	14	5	3	8	14	8	5	...	5
September.....	13	3	16	10	3	13	15	9	4	...	4
October	9	4	13	6	4	10	11	4	2	...	2
November	11	6	17	7	6	13	16	5	3	...	3
December	9	5	14	8	5	13	13	9	...	...	...
Totals	111	42	153	75	39	114	139	62	31	2	33

TABLE SHEWING THE TOTAL NUMBER OF DEATHS FROM DROWNING DURING THE LAST TEN YEARS.

Year...	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	Total
Deaths	35 ...	26 ...	46 ...	44 ...	28 ...	37 ...	42 ...	46 ...	34 ...	37 ...	371

New Dwelling-Houses.

The number of plans for dwelling-houses approved by the City Corporation during the year 1898 was 1685, as compared with 1481 in 1897 and 1076 in 1896.

Public Baths.

During the year one hundred and eighteen thousand three hundred and eighty-five persons have availed themselves of the use of the public baths, particulars of which are given below.

TRIPPETT.			MADELEY STREET.		
1886	...	41193	1886	...	40461
1887	...	42486	1887	...	42724
1888	...	38494	1888	...	41213
1889	...	55320	1889	...	51147
1890	...	59465	1890	...	54195
1891	...	61667	1891	...	48385
1892	...	57986	1892	...	53275
1893	...	57482	1893	...	58039
1894	...	54831	1894	...	61224
1895	...	58767	1895	...	67307
1896	...	54284	1896	...	59230
1897	...	55861	1897	...	59627
1898	...	56653	1898	...	61732

Flushing and Distribution of Disinfectants.

One hundred and fifty gallons of Disinfectant Fluid have been given to persons applying at the offices of the Sanitary Department; and two hundred and thirty gallons have been distributed by the Sanitary Inspectors at the houses in which infectious diseases have occurred.

Fifty-seven tons of disinfecting powder have been distributed during the process of the collection of excreta and house refuse by the various contractors during the months of June to October inclusive.

Common Lodging Houses.

A systematic inspection of these houses has been carried out by your Inspector both day and night, and special reports have from time to time been furnished to your Committee.

Food Inspection.

During the year six hundred and eighty-nine tons of Meat, Fruit, Fish, and Vegetables, &c., have been condemned and destroyed as unfit for human food.

In consequence of a discussion in reference to the method adopted for preserving herrings, I presented to your Committee the following report, namely:—

In pursuance of your Committee's resolution that the Medical Officer of Health be requested to report whether, in in his opinion, the practice of preserving herrings, by treating them with boracic acid, is satisfactory from a health point of view, the Medical Officer of Health begs to report as follows:—

Boracic acid and other various antiseptics, which were introduced about twelve years ago for the preservation of herrings, have not proved the success anticipated, in consequence of which the importation of fish preserved in this manner has greatly decreased.

Herrings preserved with boracic acid present, for a short time, a fresh appearance, but owing to the antiseptic being used with only sufficient strength to preserve the superficial structures, it is found, on splitting the herring, that the internal portions of the fish show signs of organic change, and should the antiseptic be applied sufficiently to preserve the herring in its entirety, the fish would probably be injurious to health.

The importation of herrings is greatly increasing, but they are now more generally preserved in ice, which is to be recommended as far preferable to antiseptics.

Cowsheds, Dairies and Milkshops.

Under the Cowsheds, Dairies and Milkship Order of 1885 and 1886 there were registered up to the end of 1898 265 Cowsheds and Dairies and 970 Milkshops.

Three applications were made for the registration of Cowsheds and Dairies, two of which were granted.

The number of inspections made of Cowsheds and Dairies was 821, and Milkshops 1085.

A Sub-Committee was specially appointed to visit the Cow Sheds and Dairies situate within the area recently added to the City, and after inspecting the same, reported that they had found them to be in a dilapidated and otherwise insanitary condition, and it was thereupon resolved that the regulations contained in the Cow Sheds, Dairies and Milk Shops Order, relating to lighting, cleansing, drainage and water supply, be carried out in accordance with the recommendations of the Medical Officer of Health, to the respective owners.

The number of Cow Sheds, &c., within the area added are as follows, namely :—

Number of Cow Sheds.		Number of Cows kept.		Number of Owners.
33	.....	251	.....	9

Your Medical Officer of Health communicated with each of the owners of the respective premises, pointing out the various alterations required in order to place them in a sanitary condition, and the work is being carried out with as little delay as possible.

Slaughter Houses, &c.

The number of inspections made of Slaughter Houses was 759, Curing Houses 720, and Fish Shops 1422.

Infectious Diseases (Notification) Act.

During the year 4385 cases of infectious disease have been notified by medical practitioners to your Medical Officer of Health. The Sanitary arrangements of the premises have been carefully inspected, and notices forwarded to the School Board and Free Libraries daily, notifying to them the addresses of the various cases of infectious disease.

INFECTIOUS DISEASES (NOTIFICATION) ACT, 1889.

Adopted 1st February, 1890 (Measles included 10th February, 1893).

Months. 1898.	Cholera (English).	Small Pox.	Measles.	Scarlatina.	Diphtheria.	Typhus Fever.	Typhoid Fever.	Puerperal Fever.	Continued Fever.	Relapsing Fever.	Croup.	Erysipelas.	Totals.
January	...	...	386	112	11	...	12	1	2	...	...	23	547
February	...	...	448	79	13	...	6	3	...	...	1	22	572
March	...	1	714	133	14	...	7	...	...	...	2	39	910
April	...	1	362	86	6	...	6	...	4	...	1	24	490
May.....	...	2	312	77	10	...	6	2	4	...	5	31	449
June	...	...	176	54	12	...	11	1	4	...	3	18	279
July.....	...	...	114	27	8	...	9	3	2	...	1	18	182
August	...	...	32	38	9	...	30	...	...	...	1	20	130
September ...	...	...	31	15	5	...	40	1	2	...	...	21	115
October	...	...	70	42	6	...	98	1	9	...	...	20	246
November ...	...	...	97	49	8	...	56	1	1	...	...	37	249
December ...	...	...	81	48	17	...	31	2	1	...	3	33	216
TOTALS ...	...	4	2823	760	119	...	312	15	29	...	17	306	4385

SANITARY LEGISLATION.

Of the 62 public general Acts which passed during the last session, about one-tenth have some direct bearing upon Public Health or Local Government.

One of the most important Bills, *i.e.*, one to amend and strengthen the law for preventing the adulteration of food and drugs, was introduced towards the close of the session, and consequently received practically no consideration.

VACCINATION ACT.

(61 AND 62 VIC., CH. 49.)

The Bill for amending the vaccination law has now passed into law, after occupying a very large amount of time.

The report of the Royal Commission on Vaccination, and the deadlock at which the administration of the existing Acts had arrived, rendered legislation on the subject imperative; but the measure which finally received the Royal Assent differs very materially from the Bill which was in the first instance submitted to Parliament. The object of the original Bill was merely to abolish arm-to-arm vaccination, and substitute vaccination with calf lymph; to extend the age for vaccination from three months to twelve months; to provide for the performance of the operation at the residence of the child, instead of at a public station as heretofore; and to abolish the repetition of prosecutions and penalties for refusal or neglect of vaccination.

That Bill was exhaustively discussed, and during the stage of its consideration a proposal to insert a "conscience clause" was ultimately rejected, however on being again raised the Government suddenly gave way on the point and the clause was accepted.

The Act, which came into operation on the 1st January, 1899, has to remain in force for five years only, unless in the meantime that period be extended.

METEOROLOGY.

The two latter charts embodied in the report show the fortnightly record of the Meteorological conditions throughout the year. The lower portions of the charts give a diagram of the fortnightly Death Rate from all causes, the number of deaths from Diarrhœa and Scarlet Fever, Diseases of the Respiratory Organs, and Consumption, as compared with the various Meteorological conditions.

For the Meteorological portion of the Report, I am greatly indebted to Mr. A. E. Peak, Parks Superintendent.

Meteorological Remarks.

JANUARY.

1898.

The weather during the month, taken on the whole, was fine, mild, dark, dull and overcast, with frequent fogs and mists. A few showers of rain fell at the beginning, but the total fall was only 0·73 inch, the 5th was the only really wet day during the month, 17¼ hours of sunshine being recorded. Winds for the most part S.W., occasionally S.E., moderate or light at all times. The highest reading of the maximum thermometer in the shade was 56° on the 30th and 31st, and the lowest minimum temperature being 29° on the 10th; this and the 23rd were the only days on which it was below freezing point; the highest minimum was 47° on the 20th, the lowest maximum being 39° on the 17th, and the mean temperature of the month was 42° 9′. No hail or snow fell, but fog prevailed on the 1st, 2nd, 3rd, 9th, 10th, 12th, 13th, 14th, 15th, 16th, 17th and 23rd, and Lunar Halos were seen on the 2nd, 6th and 7th. The highest reading of the barometer was 30·608 (the highest during the year) on the 15th, and it was 30·000, or higher on 24 other days, the lowest reading being 29·428 on the 1st, and the mean reading was 30·251 (the highest mean during the year). The mean temperature of the earth at 1 foot deep was 41° 9′, and at 4 feet deep 44° 9′.

February.

The weather during February was characterised by a light rainfall, a few very slight falls of hail and sleet, sometimes rather frosty, frequently with only a small amount of cloud, and may on the whole be described as fine and mild. Winds often S.W. or N.W., rather stormy on the 2nd, 4th, 15th and 16th, moderate or light at other times. The heaviest fall of rain in one day was was 0·45 inch on the 3rd, the total fall being 1·52 inch. Snow fell on the 4th, 18th, 20th and 23rd, but only in small quantities, and a little hail fell on the 6th and 20th. There was no fog, and 74½ hours of sunshine were recorded. The highest reading of the maximum thermometer in the shade was 56° on the 1st, the lowest 39° on the 5th. The highest minimum temperature was 42° on the 1st, 11th and 15th, the lowest 24° on the 21st (the lowest during the year), and it was lower than freezing point on 12 other days, the mean temperature of the month being 42° 1′. The highest reading of the barometer was 30·242 on the 11th, the lowest 29·176 on the 20th, the mean reading for the month being 29·869. The mean temperature of the earth at 1 foot deep was 39° 4′, and at 4 feet 44° 1′.

March.

This was the coldest month of the year, and the weather was more than usually variable, beginning with a squally day, and ending with a stormy week, the remaining period being generally fine, calm, and nearly free from fogs, 90 hours of sunshine being recorded. A little hail, sleet and snow fell on the 1st, 6th, 7th, 24th and 25th. Winds generally N.E. or S.W. Stormy on the 1st, 24th, 25th and 26th, fresh on the 23rd and 27th, moderate or light at other times. Rain fell on 16 days, the greatest fall in one day was 0·31 inch on the 26th, the total rainfall being 1·34 inch. The mean temperature of the month was 39° 4′ (the lowest during the year). The highest maximum temperature was 58° on the 18th, the lowest reaching 38° on the 3rd. The lowest minimum temperature was 25° on the 7th, and the highest reached 44° on the 17th and 18th.

There was frost on 19 days. The highest reading of the barometer was 30·288 on the 10th, the lowest 29·472 on the 1st, the mean reading being 29·908. The mean temperature of the earth at 1 foot deep was 39° 2′, and at 4 feet 42° 6′.

April.

Two periods of fine, but rather cloudy weather occurred during April, namely, from the 1st to the 8th, and from the 17th to the 25th (dates inclusive); the remaining portion was wet. Winds rather cold, especially after the 12th, generally E. or S.E., light or moderate at all times. Rain fell on 13 days, the greatest fall in one day being 0·97 inch on the 11th, and the total fall was 2·88 inches. Hail fell on the 4th, and there was fog on the 1st and 28th. Thunder was heard, but lightning not seen on the 29th, and 93½ hours of sunshine were recorded. The mean temperature of the month was 45° 8′, the highest maximum being 68° on the 8th, the lowest 48° on the 6th and 19th. The highest minimum was 47° on the 10th, the lowest 27° on the 5th, and it was at or below 32° on six other days. The lowest reading of the barometer 29·522, the highest 30·274 on the 24th, and the mean reading for the month was 29·929. The mean temperature of the earth at 1 foot deep was 45° 2′, and at 4 feet 45°.

May.

Rather showery weather prevailed up to the 13th, frequently with westerly winds. Afterwards it was much finer, with some bright sunny days, but very often with cold easterly winds, which were moderate or light at all times. Hail fell on the 3rd and 12th, and snow fell on the 12th. There was no fog, and 138½ hours of sunshine were recorded. Thunderstorms occurred on the 12th and 31st, and thunder was heard but lightning not seen on the 2nd, 3rd, 4th and 5th. The total rainfall was 1·82 inches, the greatest fall in one day was 0·47 inch on the 20th, and 0·01 inch or more fell on 15 days. The mean temperature was 48° 4′, the highest maximum being 64° on the 22nd, the lowest 51° on the 2nd, 12th, 20th and 21st. The highest minimum temperature was 46° on the

4th and 8th, the lowest being 34° on the 18th and 27th. The highest reading of the barometer was 30·362 on the 7th, the lowest 29·132 on the 11th, and it was below 30·000 on 20 other days, the mean reading being low, reaching 29,879. The mean temperature of the earth at 1 foot deep was 49° 9′ and at 4 feet 44° 7′.

June.

Although there were a good many more or less showery days during the month, yet there was not a heavy rainfall. The same may be said about the temperature; several warm days occurred, and it was especially dry and fine between the 7th and 19th (dates inclusive) yet the temperature on the whole was low. The winds were at all times moderate or light, but frequently cold, often N.W., S.W. or N.E. Rain fell on 14 days; the heaviest fall in one day was 0·41 inch on the 21st, the total rainfall being 1·66 inch. A thunderstorm occurred on the 6th, and thunder was heard, but lightning not seen, on the 24th and 25th. Hail fell on the 20th. There was no fog, and 131 hours of sunshine were recorded. The mean temperature was 55° 4′, the highest being 75° on the 29th, and it was 70° or higher on seven other days; the lowest maximum was 54° on the 13th and 14th. The lowest minimum was 34° on the 1st, and it was below 40° on the 3rd and 15th, the highest being 55° on the 21st. The highest reading of the barometer was 30·564 on the 13th, the lowest 29·510 on the 1st, the mean reading being 30·013. The mean temperature of the earth at 1 foot deep was 56° 9′, and at 4 feet 52° 5′.

July.

A light rainfall, a good amount of cloud, often with a low temperature, were the main characteristics of the weather during the month. Winds often northerly, strong on the 17th and 18th, fresh on the 10th, 12th, 13th, 14th and 16th, moderate or light, sometimes quite calm at other times. This was a dry month, the total rainfall being only 0·5 inch. There was no fog, and 155¼ hours of sunshine were recorded. There was a thunderstorm on the 22nd, and thunder was heard, but

lightning not seen, on the 28th. The mean temperature of the month was 58° 6′; the lowest maximum was 57° on the 9th, the highest being 74° on the 22nd and 31st, and it was 70° or higher on 11 other days. The lowest minimum was 40° on the 20th, and it was at or below 45° on five other days, the highest reading being 59° on the 14th. The highest reading of the barometer was 30·430 on the 10th, and it was 30·000 or higher on 16 other days; the mean reading for the month was 30·013. The mean temperature of the earth at 1 foot deep was 60·9′, and at 4 feet 56° 3′.

August.

Although there were a good many showers which were more remarkable for the quantity of rain that fell, yet there were many periods of fine harvest weather during the month. Rain fell on 14 days; the heaviest fall in one day was 1·10 inch (the heaviest fall during the year), the total fall being 3·71 inches—the greatest monthly fall during the year. Winds generally moderate or light, sometimes quite calm, often westerly. There was no fog, and 143¼ hours of sunshine were recorded. Thunderstorms occurred on the 21st and 28th. The mean temperature of the month was 60° 2′ (the hottest month in the year), the highest maximum being 81° on the 12th, and the lowest 57° on the 29th. The lowest minimum was 44° on the 9th and 29th, the highest being 62 0 on the 13th, and it was only 2° lower on the 11th. The mean reading of the barometer was 30·034, the highest reading being 30·310 on the 18th, and it was 30·000 or higher on 22 other days, and the lowest reading was 29·624 on the 30th. The mean temperature of the earth at 1 foot deep was 60° 3′, and at 4 feet deep 58° 4′.

September.

Fine and exceptionally dry Autumn weather prevailed throughout the month, only 0·26 inch of rain falling, which was the least monthly fall during the year. Winds very variable in direction, moderate or light in force, sometimes quite calm. There was fog on the 30th, and 115 hours of sunshine was recorded. The mean temperature was 58° 3′, the

highest maximum being 85° on the 17th, which was the hottest day during the year, and the maximum temperature was 70° or higher on 14 other days, the lowest being 54° on the 24th. The lowest minimum reading was 37° on the 28th and 30th, the highest being 59° on the 9th. The mean reading of the barometer was high, 30·126, the highest reaching 30·450 on the 4th, the lowest 29·738 on the 27th. The mean temperature of the earth at 1 foot deep was 58° 1′, and at 4 feet 58°.

October.

The drought which had prevailed for some time continued up to the 10th; after this date dull and wet weather occurred, which lasted to the end of the month. Rain fell on 18 days during the month. The greatest amount that fell in one day was 0·85 inch on the 18th. and the total fall was 3·19 inches. The prevailing winds were at first easterly, and westerly afterwards, rather stormy on the 18th and 19th, fresh on the 15th and 25th, moderate or light, sometimes quite calm at other times. Fog on the 3rd, 4th, 8th and 9th, and 51¼ hours of sunshine were recorded. The mean temperature was 51° 8′, the highest maximum was 66° on the 2nd and 3rd, the lowest being 51° on the 31st. The lowest minimum temperature was 33° on the 11th, the highest being 53° on the 5th and 6th, and it was 50° or higher on four other days. The mean readings of the barometer were low, 29·878, the lowest reading reaching 29·050 on the 17th, and the highest 30·462 on the 4th. The mean temperature of the earth at 1 foot deep was 55° 2′, and at 4 feet 55°.

November.

The weather during the month was generally dark, dull and overcast, often with fog, mist or rain, only 18¾ hours of sunshine being recorded. Rain fell on 18 days, the heaviest fall in one day being 0·59 inch on the 23rd, and the total rainfall was 2·24 inches. Winds generally S.E. or S.W., stormy on the 23rd, fresh on the 2nd, 3rd and 24th, moderate, light or calm at other times. Snow fell on the 22nd, 23rd and 28th, and hail fell on the 22nd. There was fog on the 9th,

10th, 11th, 12th, 13th, 14th, 15th, 16th and 17th. The mean temperature was 44° 4′, the highest maximum being 61° on the 3rd, and the lowest 39° on the 22nd. The lowest minimum was 26° on the 23rd, and the highest was 48° on the 12th. There was frost on six days. The readings of the barometer were low, the lowest reaching 28·916 on the 25th, the highest 30·438 on the 18th, the mean reading for the month being 29·844. The mean temperature of the earth at 1 foot deep was 47° 1′, and at 4 feet 52° 1′.

December.

The weather during the month was generally dark, dull, overcast and rather showery, but mild, only 11¼ hours of sunshine being recorded. Rain fell on 14 days. The heaviest fall in one day was 0·40 inch on the 26th, the total rainfall being 2·20 inches. Winds often S.W., stormy on the 27th, fresh on the 1st, 2nd, 6th, 10th and 28th, moderate or light at other times. Snow fell on the 20th and 31st, and there was fog on the 17th, 20th and 21st. The mean temperature of the month was 41° 5′, the highest maximum being 58° on the 5th and 6th, the lowest 38° on the 23rd and 31st. The highest minimum temperature was 50° on the 5th, the lowest being 26° on the 31st, and it was at or below freezing point on five other days. The mean reading of the barometer was 29·959, the highest reading being 30·428 on the 22nd, and the lowest 29·126 on the 29th. The mean temperature of the earth at 1 foot deep was 43° 1′, and at 4 feet 47° 6′.

I have to thank you, Mr. Chairman, Deputy-Chairman, and the members of the Sanitary Committee, for your very kind assistance at all times, and the Officials of the Sanitary Staff, who have been most unremitting in their attention.

APPENDIX

TO THE

Report of the Medical Officer of Health.

1898.

ZYMOTIC DISEASES.—STREET LIST.

DRYPOOL.

	Small Pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fevers.	Diarrhœa.
Alexandra Dock	0	0	0	0	0	1	0
Arundel Street	0	0	0	1	0	0	6
Balfour Street	0	0	0	0	1	0	2
Barnsley Street	0	2	2	0	0	1	7
Beaumont Street	0	0	0	0	0	0	3
Bellamy Street	0	0	0	0	0	0	1
Brazil Street	0	0	0	0	0	0	1
Bright Street	0	1	0	0	0	0	0
Buckingham Street	0	1	0	0	0	2	3
Burleigh Street	0	0	0	0	0	1	1
Clarence Street	0	0	0	0	0	0	1
Courtney Street	0	0	1	0	0	0	1
Craven Street	0	0	0	0	0	0	1
Crowle Street	0	0	0	0	0	1	0
Dansom Lane	0	0	0	0	1	0	1
Durham Street	0	0	0	0	0	2	1
Emily Street	0	0	1	0	0	0	0
Ferries Street	0	0	0	0	0	1	0
Field Street	0	1	0	0	0	0	1
Franklin Street	0	0	0	0	0	1	0
Graham's Row	0	0	0	0	0	0	1
Hedon Road	0	0	0	0	0	0	1
Her Majesty's Prison	0	0	0	0	0	0	1
Holderness Road	0	0	1	0	0	0	0
Hotham Grove	0	0	0	0	0	0	1
Hotham Street	0	0	0	0	0	0	1
Jalland Street	0	0	0	0	0	1	0
James Street	0	0	0	0	0	0	2

	Small Pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fevers.	Diarrhœa.
Kent Street	0	0	0	0	0	0	1
Lee Smith Street	0	0	0	0	0	3	1
Merrick Street	0	1	0	0	0	0	0
Mersey Street	0	0	0	0	0	0	1
Naylor's Row	0	0	0	0	1	0	0
New Bridge Road	0	0	0	0	0	0	1
Nornabell Street	0	0	0	0	0	0	4
Portobello Street	0	0	0	0	0	0	1
Prospect Place	0	0	0	0	0	0	1
Raven Street	0	0	0	0	0	2	0
Ripon Street	0	0	0	0	0	0	1
Sanatorium	0	0	0	0	0	1	0
Seward Street	0	0	0	0	0	0	1
Shaw Street	0	0	0	0	0	0	1
Thomas Street	0	1	0	0	0	0	0
Victor Street	0	0	0	0	0	0	2
Waller Street	0	1	0	0	0	0	2
Warwick Street	0	1	0	0	0	0	1
Wentworth Street	0	0	0	0	0	0	1
Williamson Street	0	0	0	0	0	0	3
Woodhouse Street	0	0	0	0	0	1	0
Wyke Street	0	0	0	0	0	1	1
SUTTON.							
Albert Street	0	0	0	0	0	0	1
Bedford Street	0	0	0	0	0	0	4
Chapman Street	0	0	0	0	0	0	4
Cleveland Street	0	0	0	0	0	0	1
Cornwall Street	0	0	1	0	0	0	2
Cuthbert Street	0	0	0	0	0	1	0
Dalton Street	0	0	0	0	0	0	1
Duncan Street	0	1	0	0	0	0	0
Hodgson Street	0	0	0	0	1	0	3
Jenning Street	0	0	0	0	1	0	0

	Small Pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fevers.	Diarrhœa.
Lime Street	0	1	0	0	0	0	1
Nelson Street	0	0	0	0	1	0	0
St. Mark Street	0	2	0	0	3	0	5
Sidney Street	0	0	0	0	0	1	1
Sitwell Street	0	0	0	0	0	0	1
Spittle Street	0	0	0	0	0	0	1
Sutton Bank	0	0	0	0	0	2	1
Spyvee Street	0	0	0	0	0	0	2
Witham	0	0	0	0	0	0	2
Withernsea Street	0	1	0	0	0	0	1

EAST SCULCOATES.

Bishop Street	0	0	0	0	1	0	2
Bourne Street	0	0	0	0	0	0	1
Bromley Street	0	1	1	0	0	0	0
Cumberland Street	0	0	0	0	0	0	1
Dock Street	0	0	0	0	0	0	1
Green Lane	0	0	0	0	0	0	1
Kirkby Street	0	0	1	0	0	0	0
Lincoln Street	0	0	0	0	0	0	1
Lockwood Street	0	0	0	0	0	0	2
New George Street	0	2	0	0	0	2	5
Northumberland Avenue	0	0	0	0	0	0	1
Oxford Street	0	0	0	0	0	0	2
Princess Street	0	0	0	0	1	0	1
Scott Street	0	0	0	0	1	0	0
Sculcoates Lane	0	1	0	0	0	1	2
Swann Street	0	2	0	1	0	0	5
Sykes Street	0	0	1	0	1	0	1
Westmoreland Street	0	2	0	0	0	0	2
Wincolmlee	0	0	0	0	0	0	4
Worship Street	0	0	0	0	1	0	0
York Street	0	0	0	0	3	0	2

WEST SCULCOATES.

	Small Pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fevers.	Diarrhœa.
Albany Street	0	3	0	0	0	0	0
Alicia Street	0	0	0	0	1	0	1
Beverley Road	0	0	0	0	0	0	1
Blundell Street	0	0	0	0	0	0	1
Bridlington Street	0	0	1	0	0	1	1
Brunswick Avenue	0	0	0	0	0	0	1
Cannon Street	0	0	0	0	0	0	2
Cave Street	0	1	0	0	0	0	0
Charles Street	0	0	0	0	3	0	2
Clifton Street	0	0	0	0	0	0	1
Cottingham Drain Side	0	0	0	0	0	0	0
Derby Street	0	0	0	0	0	0	2
Edward Street	0	0	0	0	1	0	0
Epworth Street	0	0	0	0	0	0	2
Fern Street	0	0	0	0	0	0	1
Finsbury Street	0	0	0	0	0	0	1
Fountain Road	0	1	0	0	0	0	0
Francis Street, E	0	0	0	0	1	0	0
Gibson Street	0	0	0	0	0	0	1
Grange Street	0	1	0	0	0	0	3
Grosvenor Street	0	2	0	0	0	0	1
Harley Street	0	0	0	0	0	0	1
King Street	0	1	0	0	0	0	0
Liddell Street	0	0	0	0	0	0	1
Lorne Street	0	2	0	0	0	0	1
Margaret Street	0	0	0	0	0	0	1
Marlborough Terrace	0	0	0	0	0	0	2
Mayfield Street	0	1	0	0	0	0	1
Middleton Street	0	0	0	0	0	0	1
Norfolk Street	0	0	0	0	0	0	1
Park Grove	0	0	0	0	0	1	0
Providence Row	0	0	1	0	0	0	0

	Small Pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fevers.	Diarrhœa.
Reform Street	0	0	0	0	0	0	1
Rodney Street	0	0	0	0	0	0	1
Rose Street	0	0	0	0	1	0	1
St. Paul Street	0	2	0	0	2	0	5
Sculcoates Lane	0	1	0	0	2	1	2
Sculcoates Workhouse	0	0	0	0	0	0	1
Somerscales Street	0	0	0	0	0	0	1
Symons Street	0	0	2	0	0	0	0
Temple Street	0	1	0	0	0	0	0
Terry Street	0	1	0	0	0	0	1
Vincent Street	0	0	0	1	0	0	0
Waterloo Street	0	2	0	0	2	1	1
Waterworks Street	0	0	0	0	0	1	2
Worsley Street	0	0	0	0	1	0	0

HUMBER.

Adelaide Street	0	1	0	0	0	0	1
Canning Street	0	1	0	0	0	0	0
Cambridge Street	0	0	0	0	0	0	1
Castle Street	0	0	0	0	1	0	1
Chapel Street	0	0	0	0	0	0	1
Charlotte Street	0	0	0	0	0	0	1
Carr Lane	0	0	0	0	0	0	1
Cogan Street	0	1	0	0	0	0	1
Collier Street	0	1	0	0	0	0	0
Colonial Street	0	1	0	0	0	0	1
Edward's Place	0	0	0	0	0	0	4
Fawcett Street	0	0	0	0	0	0	1
Fetter Lane	0	0	0	0	0	1	0
Great Passage Street	0	0	0	0	0	1	0
Great Thornton Street	0	0	0	0	0	0	2
High Street	0	1	0	0	0	0	1
Humber Dock Side	0	0	0	0	1	0	0

	Small Pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fevers.	Diarrhœa.
Land of Green Ginger ...	0	0	0	1	0	0	0
Lower Union Street	0	1	0	0	0	0	0
Market Place	0	0	0	0	0	1	0
Michael Street	0	0	0	0	0	0	1
Moxon Street	0	2	0	0	1	0	1
North Street	0	0	0	0	0	0	1
Osborne Street	0	0	0	0	0	1	2
Pease Street	0	0	0	0	0	0	1
Porter Street	0	0	0	0	0	1	6
Roper Street	0	0	0	0	0	0	1
Royal Infirmary.....	0	1	0	1	0	2	0
St. Stephen's Square.....	0	1	0	0	0	0	0
Salthouse Lane	0	0	0	0	0	0	1
Short Street	0	0	0	0	0	0	2
Spencer Street	0	0	1	0	0	0	1
Spring Street	0	0	0	0	0	1	1
Temperance Street	0	0	0	0	0	0	1
Wakefield Street	0	0	0	0	0	0	1
Walker Street.....	0	0	1	0	2	0	1
Waterhouse Lane	0	0	0	0	0	0	1
Waverley Street.....	0	0	0	0	1	0	1
West Street	0	0	0	0	0	0	3
William Street	0	0	0	0	0	0	3
MYTON.							
Adelaide Street	0	0	0	0	1	0	1
Alexandra Street	0	0	0	0	0	0	1
Anlaby Road	0	0	0	0	0	1	0
Bean Street	0	3	0	1	1	0	3
Boynton Street	0	0	1	0	0	0	1
Boulevard, South	0	0	0	1	0	0	1
Campbell Street.....	0	0	0	0	4	0	5
Clarendon Street	0	0	0	0	0	0	1

	Small Pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fevers.	Diarrhœa.
Constable Street	0	0	1	0	1	1	0
Convent Lane	0	1	0	0	0	0	1
Conway Street	0	0	0	0	0	0	1
Daltry Street	0	0	0	0	0	0	2
Day Street	0	1	1	0	1	1	1
Derringham Street	0	0	0	0	0	0	1
Division Road	0	0	0	0	0	0	3
Edgar Street	0	0	0	0	0	0	1
Fountain Street	0	0	0	0	0	0	1
Gilbert Street	0	0	0	0	0	0	1
Goodwin Street	0	1	0	0	0	0	0
Harrow Street	0	1	1	0	0	1	3
Hessle Road	0	1	0	0	0	0	0
Hull Workhouse	0	0	0	0	0	0	1
Jackson Street	0	0	0	0	0	0	2
Jane Street	0	1	0	0	0	0	1
Kimberley Street	0	0	0	0	0	0	2
Lansdowne Street	0	0	0	0	0	0	1
Londesborough Street	0	1	0	0	0	0	3
Marmaduke Street	0	0	0	0	0	0	1
Mechanics' Lane	0	0	0	0	0	0	2
Parrott Street	0	0	0	0	0	0	2
Redbourne Street	0	0	0	0	0	1	0
Regent Street	0	0	0	0	0	0	1
Rosamond Street	0	1	0	0	1	0	2
Spring Bank, W.	0	0	0	0	0	0	1
South Parade	0	0	1	0	2	0	2
Staniforth Place	0	1	1	0	0	0	2
Stanley Street	0	0	0	0	0	0	1
Strickland Street	0	0	0	0	1	2	5
Tadman Street	0	0	0	0	0	0	2
Tomlinson Street	0	0	0	0	1	0	1
Trinity Street	0	0	0	0	0	0	1

	Small Pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fevers.	Diarrhœa.
Vauxhall Grove	0	0	0	0	1	0	1
Victoria Hospital	0	1	0	0	0	0	14
Villa Place	0	0	0	1	0	0	0
Walcott Street	0	0	0	0	0	0	1
Walker Street	0	1	0	0	0	1	4
Walliker Street	0	0	0	0	1	1	1
Wassand Street	0	2	0	0	0	0	1
Wellsted Street	0	0	1	0	1	0	2
West Parade	0	0	0	0	1	0	3
Wyndham Street	0	1	0	0	0	0	0
NEWINGTON.							
Albert Street	0	0	0	1	0	0	0
Arthur Street	0	0	0	0	0	0	1
Beecroft Street	0	0	0	0	0	2	0
Brighton Street	0	1	0	0	1	0	2
Carlton Street	0	0	0	0	0	0	1
Chiltern Street	0	0	0	0	1	1	5
Eastbourne Street	0	0	0	0	0	1	5
Edinburgh Street	0	0	0	0	0	0	1
Evan's Square	0	1	0	0	0	0	0
Gillett Street	0	1	0	0	2	0	5
Glasgow Street	0	1	0	0	2	1	3
Granville Street	0	0	0	0	0	0	1
Havelock Street	0	1	0	0	0	0	0
Hawthorn Avenue	0	0	0	0	1	0	2
Liverpool Street	0	0	0	0	0	0	3
Manchester Street	0	0	0	0	1	0	2
Massey Street	0	0	0	0	0	1	1
Plane Street	0	0	1	0	0	0	0
St. Andrew's Street	0	0	0	0	1	0	0
St. George's Road	0	2	2	0	0	2	2
Spring Grove, Anlaby Rd.	0	0	0	0	0	0	1
Subway Street	0	0	0	0	0	0	3

	Small Pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fevers.	Diarrhœa.
Walton Street	0	0	0	0	0	0	1
Westbourne Street	0	0	0	0	1	0	1
West Dock Street	0	0	0	0	0	0	1
Wheeler Street	0	0	1	0	1	0	1
Witty Street	0	0	0	0	0	0	1
Woodcock Street	0	2	0	0	0	2	3
NEWLAND.							
Alexandra Road	0	0	0	0	0	0	1
Beverley Road	0	0	0	0	0	1	0
Elm Street	0	0	0	0	1	0	2
Grafton Street	0	0	0	0	0	0	1
May Street	0	1	0	0	0	0	0
Prince's Road	0	0	0	0	1	0	1
Roseberry Avenue	0	0	0	0	0	0	1
Reynoldson Street	0	0	0	0	0	0	1
St. Augustine's Avenue	0	0	0	0	0	0	1
Salisbury Gardens	0	0	0	0	0	0	1
Saltings Lane	0	0	0	1	0	0	0
Sharp Street	0	0	0	0	0	0	1
STONEFERRY.							
Buxton Grove	0	0	0	0	0	0	1
Ferry Avenue	0	0	1	0	0	0	1
Garbutt's Row	0	0	0	0	0	0	1
Stoneferry Road	0	0	0	0	0	0	1
Sutton Grove	0	0	0	0	0	0	1

MARFLEET.

Nil.

TOWN HALL,

HULL, 1899.

To the Medical Officer of Health.

SIR,

I beg to present you my Report upon the work done in the Nuisance Inspector's Department during the year 1898, in the usual tabular form.

In one or two cases I have appended the totals of similar tables for 1897, for your more ready comparison.

I am, Sir,

Your obedient Servant,

C. W. EVINGTON,

Cert. Assoc. San. Inst.

No. 17.—Table showing the number of Nuisances dealt with by legal notice in 1893 :—

Orders given to Abate.	No. of Nuisances.
To Cleanse choked gullies	694
,, Provide and repair defective pavement	460
,, Provide sanitary gullies	388
,, Repair privies	327
,, Remove or disconnect privies from houses	15
,, Provide privy accommodation	18
,, Provide new sanitary pipe drainage	321
,, Cleanse choked drains	501
,, Cleanse and limewash dirty premises	22
,, Erect, cleanse and repair spouting	28
,, Remove offensive refuse	23
,, Remove manure	6
,, Remove stagnant water	17
,, Disconnect sink waste-pipes from drains	30
,, Disconnect spouts from drains	18
,, Relay or repair drains	58
,, Repair roofage	25
,, Abate stench nuisances	14
,, Remove pigs and erect new sties	6
,, Abate smoke nuisances	3
,, Erect and repair water-closets	87
,, Abate nuisances from damp walls	4
,, Erect and repair manure-steads	1
,, Erect and repair urinals	9
,, Provide dust-bins	23
,, Remove poultry, pigeons and animals	9
,, Cease overcrowding of premises	7
,, Repair or close dilapidated premises	...
,, Provide ventilation under ground-floor	27
,, Provide new drainage and pavement to pig-sties	...
Total	3141

No. 18.—Record of Drainage done by order of legal notice during the year 1898.

Number of Houses provided with New Drains in lieu of Defective Drainage ...	423
Number of Areas and Back Passages drained	181
Number of Sanitary Gullies provided ...	447
Length of new Sanitary Pipe Drainage..	10337 feet
Square feet of Pavement (New) ...	36520

Record of work done by letter or private arrangement during the year 1898.

Houses provided with new drainage ...	43
Length of Drainage	4344 feet
Sanitary Gullies	179
Houses provided with new pavement ...	48
Water Closets provided	70
Privies provided, repaired or disconnected	57
Square feet of pavement	8959
Areas Drained and Paved	24
Drains, Gullies, and Premises cleansed.	209
Intercepting Traps provided	6
Removals of Manure	55
Urinals provided	1

OFFENSIVE TRADES AND SMOKE NUISANCE REPORT.

For the Year ending December 31st, 1898.

Offensive Trades (Day Inspections)	2700
,, ,, (Night Inspections)	220
Smoke Inspections	500
Pigsties Inspected	1302
Total	4722

No. 19.—TABLE SHEWING CASES OF ZYMOTIC DISEASES INVESTIGATED DURING 1898.

DISTRICTS.	Small Pox.	Measles.	Scarlatina.	Diphtheria.	Croup.	Whooping Cough.	Fevers.	Diarrhœa.	Erysipelas.	Continued Fever.	Puerperal Fever.	Total.
Drypool	1	498	197	18	3	3	99	60	50	14	4	947
Sutton	..	265	28	5	2	6	8	31	22	1	2	370
East Sculcoates	...	202	36	4	3	8	20	34	9	1	3	320
West Sculcoates	2	518	141	28	3	14	32	46	82	...	1	867
Humber	1	156	47	15	1	6	53	45	44	8	1	377
Myton	...	496	143	19	4	17	58	88	39	4	1	869
Newington	...	339	94	10	...	11	20	46	35	1	...	556
Newland	...	206	27	6	...	2	7	10	5	...	...	263
Stoneferry	...	85	22	...	...	...	...	5	2	...	...	114
Marfleet	...	1	...	...	...	...	...	...	...	...	...	1
Totals	4	2766	735	105	16	67	297	365	288	29	12	4684

No. 20.

Table shewing number of Articles, also Books from the Free Libraries, Disinfected at Hospital, and Houses Fumigated, during the year 1898.

MONTHS.	No. of Books.	No. of Articles.	HOUSES FUMIGATED.	
			DISTRICTS	No. of Houses.
January ...	35	1294	Drypool	517
February ...	37	964	Sutton.....	162
March	103	1678	East Sculcoates...	157
April	65	116	West Sculcoates...	380
May	45	809	Humber	154
June	32	470	Myton	380
July	9	229	Newington	335
August	—	315	Newland	185
September	3	292	Stoneferry	70
October	—	629	Marfleet	1
November...	11	721		
December...	2	647		
Totals for year	342	8164		2341

No. 21.—Table shewing number of Applications made at the Sanitary Office for the attendance of the Night-soil Contractors, with *bona-fide* complaints.

Date.	No. of Applications.	No. of Bona-fide Cases.	Night-soil.	Dry-dust.
Jan. 8	133	4	1	3
,, 22	113	1	—	1
Feb. 5	114	—	—	—
,, 19	88	1	1	—
March 5	93	—	—	—
,, 19	118	1	—	1
April 2	144	—	—	—
,, 16	92	—	—	—
,, 30	162	—	—	—
May 14	161	1	1	—
,, 28	191	2	—	2
June 11	179	1	1	—
,, 25	178	1	1	—
July 9	160	4	2	2
,, 23	151	3	2	1
Aug. 6	110	—	—	—
,, 20	143	—	—	—
Sept. 3	161	5	2	3
,, 17	167	6	3	3
Oct. 1	146	2	2	—
,, 15	127	1	—	1
,, 29	128	41	22	19
Nov. 12	141	1	1	—
,, 26	136	2	—	2
Dec. 10	157	1	1	—
,, 24	133	1	—	1
Total, 1898	3626	79	40	39
Total, 1897	3224	58	14	44

No. 22.

Table shewing number of Registered and Licensed Premises requiring inspection.

Description of Premises.	No.
Common Lodging Houses	35
Slaughter Houses	86
Fish Curing Houses	56
Cow Sheds (2700 Cows)	265
Milk Shops	970
Tripe Boiling Houses	12
Fat and Tallow Melting Works	11
Soap Boilers	5
Bone Boiling Works	4
Gut Scraping ,,	4
Ammoniacal Liquor Works	2
Knackeries	2
Fish Manure Works	2
Cod Liver Boilers	5
Total	1459

No. 23.

Table of Common Lodging Houses, their situation, and the number of Rooms and Lodgers.

STREETS.	No. of Houses.	No. of Rooms.	Registered No. of Lodgers.
Blanket Row	5	42	318
Charlotte Street	1	15	80
Cross Street	1	5	23
Dock Street	4	23	146
Empringham Street	1	9	72
Finkle Street	1	8	27
Garden Street	2	8	22
Great Union Street	3	24	230
Little Humber Street	1	13	75
Mill Street	4	22	75
Myton Place	1	7	42
Osborne Street	2	11	60
Robinson Row	1	8	33
Salthouse Lane	3	23	145
Waltham Street	1	7	53
Waterhouse Lane	2	14	106
West Street	2	13	70
Totals	35	252	1577

No. 24.

Table shewing Meat, Fruit, Fish, &c., seized and condemned by Inspector, destroyed as unfit for human food during the year 1898.

Kind of Food Destroyed.	Quantity in lbs.
51½ Beast Carcases	28840
108½ Sheep Carcases	6076
76 Calf Carcases	6384
45¼ Pig Carcases	3801
6½ Lamb Carcases	364
Meat, &c.	15518
Yeast	1116
Eggs	300
Fruit	230533
Vegetables	205408
Fish	982023
Mussels, Cockles, &c.	33962
Hares, Rabbits, Geese, Chickens, &c.	29372
Total in lbs.	1543697
Total for 1897	1243023

No. 25.—TABLE SHEWING APPLICATIONS FOR LICENSES AND REGISTRATIONS DURING THE YEAR 1898.

Name.	Premises.	Places Registered.	Result.
Frank Green	Sharp Street	Cowshed and Dairy	Granted.
Walker, Wallis & Co., Ltd.	Corner Cumberland Street and Fountain Road	Soap Boilers	Do.
Wm. H. Bailey	Marfleet	Cowshed and Dairy	Not Granted.
Louis Bischoff & Co	Blanket Row	Gut Scraping	Do.
J. W. Langley	West Dock Street	Fish Curing	Granted.
Thomas Milner	83, Sharp Street	Cowshed and Dairy	Do.
Carl Roemer	Alfred Street	Gut Scraping	Do.
C. J. Schultz	Clough Road, Stoneferry	Do.	Do.
James Harding	101, Havelock Street	Fish Curing	Do.
J. H. Milestone	Hill Street, Stoneferry	Chemical Works	Not Granted.

No. 26.—TABLE SHEWING SAMPLES TAKEN UNDER "FOOD AND DRUGS ACT," AND RESULTS.

Description of Sample.	No. of Samples.	Pure.	Adulterated	Prosecutions.	Results.
Milk	164	155	9	9	Fined 50s. and costs. Fined 20s. and costs. Fined 20s. and costs. Fined 20s. and costs. Fined 10s. and costs. Fined 5s. and costs. Fined 5s. and costs. Dismissed on payment of costs. Withdrawn on payment of costs.
Coffee	16	15	1	1	Fined 20s. and costs.
Butter	14	14	...	...	.....
Whiskey	7	6	1	1	Fined 20s. and costs.
Malt Vinegar	6	6	...	...	.....
Totals.....	207	196	11	11	Penalties £8 10s.

No. 27.—TABLE SHEWING SANITARY PROSECUTIONS, 1898.

Date.	Offence.	Result.
1898.		
" 4th.....	Selling Milk adulterated with 10·95 % of added water	Fined 10s. and costs.
" 4th.....	Contraving Provisions of Canal Boats Acts	Fined 20s. and costs.
" 4th.....	Exposing for sale Herrings totally unfit for human food	Fined 50s. and costs.
March 18th.....	Carrying on Manufacture of Fish Manure without the consent of Sanitary Authority	Fined £10 and costs.
April 15th.....	Establishing the trade of Gut Scraping without consent of Sanitary Authority	Fined 20s. and costs.
May 13th.....	Allowing Cabin to be used contrary to the provisions of Canal Boats Acts..	Fined 10s. and costs.
" 13th.....	Allowing Canal Boat to be used contrary to the provisions of Canal Boats Acts.....	Withdrawn on conviction being obtained against employer.
June 24th.....	Selling Milk adulterated with 8·9 % of added water	Fined 20s. and costs.
" 24th.....	Non-compliance with Notice to abate Nuisance	Ordered to pay costs (£1 5s. 6d.)
" 24th.....	Using Canal Boat as Dwelling-house without same being registered in pursuance of Act	Fined 10s. and costs.
July 8th.....	Selling Milk adulterated with 10 % of added water	Dismissed on payment of costs.
September 23rd.....	Selling Coffee consisting of one part Chicory and one part Coffee	Fined 20s. and costs.
October 14th.....	Selling Milk adulterated with 6·59 % of added water	Withdrawn on payment of costs.
" 14th.....	Contravening Sec. 4 of Shop Hours Act, 1892.....	Fined 5s. and costs.
" 14th.....	Allowing over-crowding at a Common Lodging House	Fined 10s. and costs.
" 28th.....	Selling Milk adulterated with 5·5 % of added water	Fined 20s. and costs.
" 28th.....	Do. do. 20·12 % do.	Fined 20s. and costs.
" 28th.....	Do. do. 25·77 % do.	Fined 50s. and costs.
December 9th.....	Selling Milk adulterated with 8·24 % of added water	Fined 5s. and costs.
" 9th.....	Do. do. 7 % do.	Fined 5s. and costs.
" 23rd.....	Selling Whiskey reduced from 25 degrees under proof to 34·5 degrees under proof by the addition of 12·76 % of water	Fined 20s. and costs.

ANNUAL REPORT OF THE INSPECTION AND REGISTRATION OF CANAL BOATS.

For the Year Ending Decembrr 31st, 1898.

Boats inspected	2454
Additional inspections made to ascertain if notices served had been complied with	212
Total number of inspections	2666
Boats in good order	2249
Contravening the Acts	205
	2454

The 2444 boats inspected during the year are registered to accommodate 14,283 adult persons, whilst only 5169 adults, of which 4105 were males and 1064 were females, and 1145 children, were found occupying the said boats.

Particulars of Contraventions.

		Defects.	Remedied.
Not properly lettered and numbered		33	32
Absence of certificates		33	32
Requiring repairs :—			
Decks	28		
Stoves	9		
Decks and stove ...	2		
Decks and cupboards ...	2		
Coal locker	1		
Cabin floor	1		
Cabin front	2		
Decks, locker and cupboards	1	52	50
Stove and berth ...	1		
Without proper berth...	1		
Deck, chimney and cupboards	1		
Deck, cupboards and floor	1		
To water casks... ...	2		
Certificates not identifying owners or boats...		36	35
Requiring renewal of paint... ...		56	53
Change of master not notified ...		3	3
Carried forward ...		213	205

Brought forward ...	213	205
Not in a cleanly condition	6	6
Overcrowding	3	3
Not properly ventilated	4	4
Females over age	6	6
Accumulation of bilge water ...	1	1
Refusal of admittance to Inspector.	—	—
Carrying offensive cargoes without the requisite double bulkheads	4	4
Unregistered boats	7	7
Total ...	244	236

In reference to the eight contraventions unremedied, notices have been sent either to the owners or masters, which I expect will shortly be complied with.

The seven contraventions existing when my last annual report was presented, have since been remedied.

Notices and letters issued during the year:—318.

In addition to the written notices or letters sent to the owners, the masters of all boats contravening the Acts have been verbally cautioned.

INFECTIOUS DISEASES.

Whooping Cough.

On the 15th March, I inspected the canal boat "Dido," registered No. 359, Hull, owned by Mr. Richard Dunston of Thorne, on which a male child, aged one year, had died from whooping cough. The child sickened on the 7th March, and died on the 12th March. The boat was lying in the Humber Dock, and was occupied by the master, his wife, and one other child aged three years. The boat was in a good and cleanly condition. I fumigated the cabins, and a certificate of disinfection was granted by the Medical Officer of Health.

Choleraic Diarrhœa.

On the 10th September, the Medical Officer of Health, accompanied by myself, inspected the canal boat "Charles and Zillah," registered No. 219, Doncaster, and owned by Mrs. Z. Oldfield, of Stockwith. The vessel arrived in the Albert Dock on the 10th September with a cargo of slag from Park Gate, Rotherham. Upon our inspection we found that the

master, John Tomlinson, aged 48 years, was suffering from Choleraic Diarrhœa. The patient was immediately removed to the Hospital and the boat disinfected. The boat was in a good and cleanly condition, and was occupied by the master and his two sons, aged 17 and 5 years respectively.

Typhoid Fever.

On the 2nd November, the Deputy Medical Officer of Health, in company with myself, inspected the canal boat "Don," registered at Nottingham No. 107, and owned by the Trent Navigation Company, of Nottingham. The boat was lying in the Alexandra Dock, and upon our inspection we found one of the Master's sons, aged 16 years, to be suffering from Typhoid Fever. The patient was immediately removed to the Sanatorium, the cabins thoroughly fumigated and a certificate of disinfection granted by the Medical Officer of Health. The boat was in a good and cleanly condition, and was occupied by the Master and his two sons, aged 18 and 16 years respectively.

Precautions against Infectious Diseases.

Owing to the prevalence of Smallpox in the Goole district in the middle of the year, a special circular letter was prepared by the Medical Officer of Health and issued to the occupants of boats trading to and from that district.

Bills of precaution against infectious diseases have also been freely distributed amongst the canal boats trading to and from this city.

Legal Proceedings at the City Police Court.

In three cases legal proceedings were deemed necessary during the year.

On March 17th, the master and owner of the canal boat "Friendship," registered No. 171, Goole, was fined 20s. and costs for allowing an adult female to occupy each cabin with a male over the age of 14 years, contrary to the provisions of the Acts, he having been previously cautioned about the same offence.

On June 21st, the master and owner of the canal boat "Onward," registered No. 61, Wombwell, was fined 10s. and costs for allowing an adult female to occupy the after-cabin with himself, she not being his wife. He had been previously cautioned about the same offence.

On June 28th, the master of the canal boat "Mail,' trading between Hull and Driffield, was fined 10s. and costs for using the boat as a dwelling, the same not having been registered.

REGISTRATION DEPARTMENT.

Total number of boats on the register December 31st, 1897	322
Registered during the year	26
	348
Cancelled during the year	13
Total number on register, December 31st, 1898	335

Particulars of boats, the registration of which has been cancelled during the year:—

Unfit to be occupied as dwellings ...	2
Lost or broken up	4
Registered under the Merchant Shipping Act	3
Owing to structural alterations... ...	1
Ceased to be used as dwellings, and used only as lighters	2
Owing to change of ownership and boat's name	1
	13

Change of master on 67 boats, of ownership on 19 boats, and of boats' names in 3 cases, have been registered during the year.

Either from personal knowledge or correspondence, I am able to state that the 335 boats on the register at the end of the year are in actual use at the present time.

Within recent years a number of boats, regularly plying upon the canals of this district, and which were formerly registered under the Canal Boats Acts, also a considerable number of new boats designed and being used for canal traffic, and which are precisely the same in build and trade as those boats now under the operation of the Acts, have been registered under the Merchant Shipping Act, doubtless, in many cases, to evade the provisions of the Canal Boats Act.

As an illustration, a very striking case came under my notice during the year. The master, who is also owner, of the Canal Boat "Friendship," already referred to as having been fined on March 17th, for committing a breach of the Acts, was found by me, on November 9th, using his boat in contravention of the same section of the Act. When I informed him that if he persisted in ignoring the provisions of the Acts, I should report him to the Sanitary Committee, he in reply stated that he would register his boat with the Board of Trade, and pointed out that we should then be unable to interfere with him. This, I may say, he has since done.

There is a further number of boats which were formerly employed in the coasting trade, and are registered under the Merchant Shipping Act, which have ceased to be so used, and are now regularly trading upon the canals.

The total number of boats above referred to which are being ordinarily used for the conveyance of goods upon the canals of this district, without being registered under the Canal Boats Acts, is not less than 120, which number is gradually increasing.

Unless the power vested in the Local Government Board by virtue of Section 10 of the Canal Boats Act of 1884 be exercised, so as to make it absolutely necessary for all boats ordinarily used for the conveyance of goods upon any canal, to be registered under the Canal Boats Acts, notwithstanding such boats being registered under the Merchant Shipping Acts, the statutory benefits intended to be conferred upon the Canal Boats population will be lost in a considerable number of cases.

Factory and Workshop Act, 1891 and 1895.
Shop Hours' Acts, 1892 to 1895.

General Remarks.

During the year the calls upon your Inspector have been spread over a greater area than in the past, partly owing to the extension of the City boundary, and partly owing to the opening of workshops in the outlying districts, in consequence of which many of the shops in the City have not been visited during the year, and many of the workshops only once; nevertheless there is every reason to believe that the Acts have been generally well regarded.

Factories.

The principal part of the work done in factories has been in respect to sanitary accommodation and drainage, and in advising persons as to the sanitary adaptation of old buildings for factory purposes.

We have received five complaints from Her Majesty's Inspector of Factories in respect to insufficient sanitary accommodation, all of which have received attention, and the necessary additions and alterations have been made in each case.

Workshops.

A systematic inspection of workshops has been carried on through the year, and, generally speaking, there has been little difficulty in getting occupiers to comply with the sanitary regulations.

During the past year several workshops have been converted into factories by the installation of small gas engines or electrical motors. The latter offer a convenient motive power for light machinery, and has the double advantage of taking up little room and is free from the emission of offensive fumes usually emitted by gas and oil engines.

Fire Escapes.

The inspection of means of escape in case of fire in factories and workshops has been steadily carried on, and in all cases where new factories have been built our recommendations have been put into effect.

Up to the present time seven new factories have been furnished with fire escape certificates.

Bakehouses.

My remarks of last year in respect to bakehouses are applicable to the present time.

One occupier was prosecuted for allowing his bakehouse to be in such a state as to be unfit, on sanitary grounds, for occupation as such, and a fine was imposed, which had a salutory effect, and one insanitary bakehouse has been closed on the representation of the Medical Officer of Health to the owners and the occupier that the premises were unfit for use as a bakehouse.

Outworkers.

The inspection of outworkers' premises has been continued during the year with satisfactory results. A case of Scarlet Fever was discovered in a tailor's house where clothes were being made, the occupier of which refused to have the patient removed for isolation ; therefore the work was stopped, and the goods in the course of manufacture were at once taken possession of and disinfected, and delivered to the employer as speedily as possible.

Shop Hours Acts.

The carrying out of these Acts has absorbed a large proportion of your Inspector's time.

The erection of shops in the outlying districts of the City, in almost all directions, has rendered it increasingly difficult for the Inspector to cover the ground under his charge.

The prosecutions you have authorized during the year have had a good effect as a deterrent against breaches of the Acts.

There has been but little improvement in the reduction of shop hours in the City. I am still of opinion that the Shop Hours Acts will not be as efficient as is desired until they are made to limit a day's work and provide for proper meal times.

PROSECUTIONS INSTITUTED BY THE SHOP HOURS AND SANITARY INSPECTOR.

Date.	Offence.	Result.
1898. February 22nd.....	Employing a young person for a greater number of hours than is allowed by the Shop Hours Act, 1892	Fined 10s. and costs.
,, 22nd.....	Do. do. do.	Fined 5s. and costs.
,, 22nd.....	Do. do. do.	Fined 5s. and costs.
November 29th.....	Failing to keep the Notice required by the Shop Hours Acts, 1892 to 1895, exhibited in a conspicuous place in Shop	Fined 5s. and costs.
December 13th.....	Do. do. do.	Fined 5s. and costs.
,, 13th.....	Employing a young person for a greater number of hours than is allowed by the Shop Hours Act, 1892	Judgement respited on payment of costs.

FACTORY AND WORKSHOPS' ACTS, 1891 AND 1895. SHOP HOURS ACTS, 1892 TO 1895.

Tabulated Statement of Inspections, Result of Inspections, Notifications to H.M. Inspector, &c.

Inspections.	No.	Results of Inspection.	No.	Notifications to H.M. Inspector, &c.	No.
Workshops	1680	Nuisances and Sanitary Defects	320	Unregistered Workshops in which protected persons were found employed	177
Factories	91	Firms' places out of order	254	Workshops where Abstract was not exhibited	35
Bakehouses	167	Nuisances and Sanitary Defects amended	315	Removals, and Workshops closed	225
Laundries	22	Firms' places put in order thereby	254	Workshops registered	299
Outworkers' premises	87	Insanitary Workshops closed	3	Bakehouses registered	2
Visits to supervise work in progress, &c	1155	Means of escape in case of fire required	1	Laundries registered	4
Fire escapes	22	Escapes provided	4	Employers of Outworkers registered	6
Shops visited	1570	Shops in which notice was not properly exhibited (requested to comply)	247	Shops in which young persons are employed registered	239
Lists of Outworkers	81	Shops exempt from the Act	354		
		Shops in which there was excess of hours	25		
Total inspections	4875				

Detailed statement of Sanitary Conveniences provided.

Privies.		Water-Closets.		Urinals.	
New.	Repaired.	New.	Repaired.	New.	Repaired.
21	2	32	9	3	—

Detailed statement of Drainage and Pavement work done.

Length of New Drains.	Number of Gullies and other Traps.	Area of New Pavement.
1003 feet.	47	2973 square feet.

SHOP HOURS ACTS, 1892 to 1895.

Number of Shops on the Register and number of Young Persons employed therein.

Number of Shops on the register in which young persons are employed ...	1924
Number of young persons employed in the same	3004

Summary of Offences against the Shop Hours Acts dealt with in the Committee.

Obstructing the Inspector.	Failing to keep the Notice exhibited.	Employing Young Persons for more than 74 hours per week.	Employing Young Persons in Workshop and Shop on the same day over legal time.
—	4	11	1

OUT-WORKERS.

Trade.	Employers.	Outworkers.
Manufacturers of Wearing Apparel	104	452
Cabinet Makers and Upholsterers	6	10
Total	110	462

WORKSHOPS.

Table shewing the trades, number of workshops at present on the register, and number of each sex employed when first inspected.

TRADES.	Number of Workshops	Hands Employed.	
		Males	Females.
Bag Makers	9	5	68
Bakers	108	249	21
Basket Makers	14	44	—
Boat Builders	6	18	—
Boot Makers	50	183	4
Bottlers of Beer	13	37	—
Brush Makers	9	64	23
Cabinet Makers	59	226	20
Chair Makers	2	62	—
Coach Builders	6	55	—
Confectioners	21	46	8
Coopers	33	149	—
Cork Cutters	4	10	—
Cycle Repairers	16	37	3
Dressmakers	236	3	1186
Firewood Cutters	10	20	3
Fish Kit Makers	2	12	—
Hosiery Knitters	8	—	29
Joiners	106	305	—
Lath Renders	7	33	—
Laundries	13	1	75
Leather Curriers	2	7	—
Maltsters	3	10	—
Marble Masons	4	10	1
Carried forward	741	1586	1441

TRADES.	Number of Workshops	Hands Employed.	
		Males.	Females.
Brought forward	741	1586	1441
Mast and Block Makers	3	9	—
Milliners	53	—	230
Netbraiders	7	—	182
Painters	6	14	4
Picture Frame Makers	7	17	—
Polishers	19	45	—
Plumbers	59	222	—
Rag Sorters	5	—	33
Ropeworkers	8	51	1
Saddlers	16	38	1
Sailmakers	24	65	—
Slippermakers	10	47	4
Smiths	63	217	—
Tailors	239	472	376
Tinsmiths	28	69	—
Upholsterers	11	19	24
Venetian Blind Makers	1	4	—
Watch and Clock Makers	26	64	2
Weighing Machine Makers	4	12	—
Wheelwrights	13	45	—
Wireworkers	1	5	—
Wood Carvers	7	30	—
Sundry Trades	86	181	94
Totals	1437	3212	2392

TABULATED STATEMENT shewing the Sanitary Districts, Estimated Population, and work done during the year 1898.

DISTRICT.	ESTIMATED POPULATION.	INSPECTORS.	GENERAL NUISANCES.				DRAINAGE.				MILK SHOPS.		INFECTIOUS DISEASES.					
			No. of Complaints Registered.	No. of Notices Served.	No. of Nuisances Abated.	No. of Houses, &c., Inspected.	No. of Choked Drains, Defective W.C.'s, Privies and Traps remedied.	No. of New W.C.'s and New Drainage provided.	No. of Supervisions of Drainage and other Works in progress.	No. of Manure-yards, &c., Inspected.	No. Inspected.	No. not in conformity with the Order.	No. of Cases Notified.	No. of Cases Investigated.	No. of Removals.	No. of Fumigations.	No. of Disinfections Medically Certified.	No. of Fever Pails supplied.
No. 1. Myton, S., Newington, S. and part Humber, S.	57871	Assistant Inspector of Nuisances J. M. Scorrer Sanitary Officer.....J. A. Fraser " " J. Caws " " R. Scott	68	507	715	1997	548	164	1951	115	365	...	1199	1398	85	301	733	197
No. 2. Myton, N., part Sculcoates, W., Newington, N., Newland, W. and part Humber, N.	57701	Assistant Inspector of Nuisances A. W. Stanley Sanitary Officer.....J. Thompson " " H. Terry " " J. O. Vaughan " " M. P. Garniss	83	420	626	1556	545	160	767	90	220	...	967	869	83	331	209	88
No. 3. Sculcoates, E., part Sculcoates, W., Newland, E. and part Humber, E.	62908	Assistant Inspector of Nuisances R. Martin Sanitary Officer .....J. Wallis " A. W. Chesterfield " H. B. McIntosh	104	421	597	1624	520	106	652	104	287	...	903	993	62	331	157	99
No. 4. East of the River Hull	51407	Assistant Inspector of Nuisances A. Rowland Sanitary Officer.....F. Stebbings	69	443	563	1727	475	50	480	95	213	...	1316	1537	91	200	479	157
City Total	229887		324	1791	2501	6904	2088	480	3850	404	1085	...	4385	4797	321	1163	1178	541

No. 28.—TABLE SHEWING THE NUMBER OF ANIMALS LANDED AT THE CITADEL SITE DEPOT, FOR THE YEAR ENDING 1898.

Quarter Ending	Beast.	Calves.	Sheep.	Pigs.	Total.	Total Landed Dead.				
						Beast.	Calves.	Sheep.	Pigs.	Total.
March 31st.....	2230	...	1097	...	3327	...	...	1	...	1
June 30th	1726	...	669	...	2395	...	...	...	...	...
September 30th...	2188	...	...	...	2188	...	...	...	...	...
December 31st ...	2115	...	...	...	2115	...	...	...	...	...
Total	8259	...	1766	...	10025	...	...	1	...	1
Total, 1897.....	8827	...	...	...	8827	...	...	...	...	...
,, 1896.....	6549	...	6576	...	13125	...	...	1	...	1
,, 1895.....	2631	...	1366	...	3997	...	...	3	...	3
,, 1894.....	5068	...	773	...	5841	..	...	2	...	2
,, 1893.....	2497	...	...	...	2497	1	...	...	...	1
,, 1892.....	5553	...	...	2634	8187	2	...	...	13	15
,, 1891.....	4939	5816	86	...	10835	4	13	...	...	17
,, 1890.....	5493	5922	250	1418	13083	4	3	...	...	7
,, 1889.....	3891	5204	16837	20921	46853	2	...	3	19	24
,, 1888.....	4153	5190	39512	16748	65603	No return.				
,, 1887.....	2887	6339	42305	1954	53485	Do.				
,, 1886.....	1637	7491	61108	2617	72853	Do.				
,, 1885...	3017	8410	23490	679	35596	Do.				

All the above 8259 Beast were from New York, U.S.A.

SANITARY DEPARTMENT.

Expenditure for the year, from April 1st, 1898, to March 31st, 1899.

	£	s	d
Nightsoil Collection	9820	5	8
New Carts and Repairs to Carts	1141	19	7
Destructor...	949	9	10
Garrison Hospital	642	4	0
Sanatorium	3889	18	2
Disinfectants	486	8	0
Office and Departmental Expenses	824	12	4
Wages	1353	9	0
Mortuary	110	16	2
Printing and Stationery	164	1	4
Notification of Infectious Diseases Act ...	551	10	6
Special Sanitary Work	203	3	10
Total...	£20137	18	5